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Walden University

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Ebru Inanc

has been found to be complete and satisfactory in all respects,
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Walden University

2018

Abstract

The Mediating Effect of Leader Member Exchange on Personality Congruence and

Affective Commitment

by

Ebru Evrensel Inanc

MA, Atılım University, 2007

BS, Hacettepe University, 1992

Proposal Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

February, 2018

Abstract

The personality congruence of supervisors and subordinates and its influence on work outcomes is a relatively new topic in social and behavioral sciences. Most well-known personality theory is Big Five that includes openness, conscientiousness, neuroticism, extraversion and agreeableness traits. LMX theory focuses on the mutual relationship between a supervisor and a subordinate. There is a gap in the literature regarding the mediating role of LMX perceptions of subordinates on the relationship between personality congruence of supervisors and subordinates and affective commitment (AC). The purpose of this cross-sectional design was first to explore the direct relationship between supervisors and subordinates personality congruence and AC of subordinates. The second purpose of this study was to explore the role of LMX as a mediator between the personality congruence of supervisors and subordinates and AC of the subordinates. A cluster sampling method was used to gather 400 supervisor-subordinate dyads from 3 technopolises in Ankara, who completed self-reported questionnaires. A technopolis is a technology science park. Polynomial regression analysis was conducted to measure the congruence level of dyads' personality traits and structural equation modeling was used to analyze the mediating effect of LMX. Results revealed that, LMX has no mediating effect on personality congruence and AC. The results also revealed that there is a significant relation between the agreeableness congruence of supervisors and subordinates, and AC. This information can be used by organizations by pairing up agreeable dyad members to increase affective commitment. The findings of this study may create positive social change by promoting optimum functioning organizations that have committed employees which would affect the society and economy in a positive way.

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Dedication

This work is definitely dedicated to my late father Feridun Evrensel, who was the first to teach me the importance of moving forward, and thus helping me reach my potentials, which I didn't even know I had. He was there with me at the beginning of my journey physically, and now at this point although he is not with me in person, I am sure he is proud of me. I have always lived up to his expectations, and will continue to do so... He is the shining light, the guiding star of my life that will never disappear. I love you, rest in peace...

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Chapter 1: Introduction to the Study

When an individual starts to work, that person's traits become one of the factors that determine his or her place in the organization. The likelihood of success for the individual increases if that person's personality shows a fit between the job itself and the organization (Gardner, Reithel, Coglisier, Walumbwa, & Foley, 2012; Ryan & Kristof-Brown, 2003; Stevens & Ash, 2001). A person's personality also affects how he or she interacts with supervisors (Gardner et al., 2012).

Work environment has an important impact on the development and moderation of personality traits by acting as a motivation factor that can satisfy the employee's personal dispositions, wants, and needs. According to Barrick (2005), personality traits play a very important role in an individual's perception and evaluation of the job and work environment. This is a bidirectional relationship in which the personality of the individual affects the job environment, and the job environment influences the individual's personality simultaneously (Murphy & Murphy, 1996).

Personality traits can be defined as physical, mental, and psychological features that separate one individual from another (Roccas, Sagiv, Schwartz, & Knafo, 2002; Soldz & Vaillant, 1999). Personality traits help to determine the similarities and differences between individuals. Biological, environmental, and situational factors act in the formation of personality traits. Biological factors are related to the influence of genes on the formation and development of personality traits, and thus, some traits might be carried down generations (Matthews, Deary, & Whiteman, 2003). The physical features of an individual have an effect on that

person's personality traits, although not directly. Physical characteristics shape self-perception, which influences the personality traits of an individual (Eysenck, 1967).

In terms of environmental factors, early childhood experiences combined with the immediate social environment influence the personality of an individual. The individual's relationship with his or her family, friendships at school, and interactions with his or her neighbors, friends, and colleagues have an impact on the behavior of the individual (Bouchard, 1994; Eysenck, 1990; Hopwood et al., 2011).

Although general personality traits are accepted as stable, in reality they may change due to various situational factors. Different situations may influence the personality of an individual in unpredictable ways, and sometimes may even help reveal implicit traits of that individual (Matthews et al., 2003). This study focuses on the personality congruence of supervisors and subordinates, and its impact on leader member exchange (LMX) perceptions and affective commitment of subordinates. I evaluated LMX perceptions of subordinates as a mediator between the relationship of personality congruence of supervisors and subordinates and subordinates' affective commitment.

In order to assess the personalities of supervisors and subordinates, I used the widely accepted Big Five personality traits model in this study, which involves the traits of extraversion, agreeableness, conscientiousness, neuroticism, and openness (Costa & McCrae, 1985; 1992). However, there is limited research in the area of personality congruence of supervisors and subordinates as antecedents of work outcomes such as absenteeism, turnover, and commitment. However, the mediating role of LMX perceptions of subordinates on the relationship between personality

congruence of supervisors and subordinates and affective commitment of the subordinates has not yet been studied.

This study has several benefits. First, by evaluating the role of personality congruence between supervisors and subordinates on the LMX perceptions of subordinates, I added to the literature by showing the current situation of supervisor-subordinate dyad congruence in a developing country such as Turkey. Secondly, a research study examining the impact of LMX perceptions of subordinates, as influenced by personality congruence of supervisors and subordinates on affective commitment would be the first in the literature. The third benefit is the advancement of technopolis organizations, especially in the ever-changing business environment. Understanding the significance of personality congruence in the work environment might help both supervisors and HR practitioners in managing absenteeism and turnover, recruiting, and hiring, as well as promoting employees. Through the results of this study, I will determine whether personality congruence leads to LMX perceptions of subordinates positively, which then leads to affective commitment. In such a dynamic work context, the supervisors' need to strengthen the commitment of employees has been increasing. The results of this study can be used to guide programs developed to improve the relationship between supervisors and subordinates, as well as improve their level of commitment to the organization.

In this chapter, I will provide the background of the proposed study. I will also provide a brief discussion of the problem statement and the justification for conducting the study. I will also discuss the purpose and significance of the study, and provide a brief introduction to the research methodology. I will follow this with a

presentation of the assumptions, limitations, and delimitations, as well as the terms that I will use in the study. I will end this chapter with a summary and discussion of the organization for the remainder of the study.

Background of the Study

Bernerth et al. (2007, 2008) suggested for future researchers to examine the relationship between LMX and organizational outcomes. They specified that in such a context, LMX acts as a mediating variable. This will be an important part of this study.

There are no studies in the literature that analyze the LMX perceptions of subordinates acting as a mediator between personality congruence of supervisors and subordinates and work outcomes (job satisfaction and commitment). Researchers in aforementioned studies have examined the relationship between personality traits and LMX only, or LMX perceptions and work outcomes only. The personality congruence of supervisors and subordinates, which influences work-related outcomes, has not received much attention in the literature. In addition, the exchange between supervisors and subordinates, and how subordinates perceive this relationship, plays an important role on work-related outcomes (Bernerth et al., 2007, 2008). In this study, I focused on investigating the traits of supervisors and subordinates as influential aspects in LMX formation. I will move beyond demographics through considering personality traits using the Big Five Inventory (BFI). Furthermore, I will use multiple perspectives to gather data in order to examine the mediating effect of LMX perceptions on the relationship among personality congruence of subordinates and supervisors and work outcomes, such as affective commitment.

Problem Statement

Disposition and job performance are related (Barrick, Mount, & Judge, 2001). Also, LMX is correlated with job satisfaction and organizational commitment (Fisk & Friesen, 2012; Martin, Thomas, Charles, Epitropaki, & McNamara, 2005; O'Connor & Srinivasan, 2010). Harris, Harris, and Eplion (2007) examined the relationships between LMX and personality variables of locus of control, need for power, and self-esteem. Harris et al. (2007) further examined the potential for LMX to mediate the associations between personality variables and work outcomes, such as job satisfaction and role conflict, and found that all three of the personality variables and LMX were significantly related to work outcomes. Conversely, Harris et al. (2007) stated the limitation of their study as working with the supervisors' personalities and perceptions of LMX, rather than gathering data from both supervisors and subordinates. The authors indicated further that a similar study should use different personality traits, such as conscientiousness, extraversion, and openness.

Bernerth et al. (2007, 2008) examined the influence of personality differences between subordinates and supervisors on perceptions of LMX, and found that the supervisor-subordinate personality similarity facilitates higher quality LMX. In addition, differences in extraversion, openness, agreeableness, and conscientiousness negatively affected employees' perceived relationship quality with their supervisors (Bernerth et al., 2008). Bernerth et al. (2008) suggested further investigation regarding how similarities or differences between the personality traits of the supervisors and subordinates and work outcomes such as job satisfaction and organizational commitment of the subordinates are mediated by LMX. Although

supervisor and subordinate personality traits are likely to predict LMX, there are contradictory findings (Zhang et al., 2012). In order to address that contradiction, further research should be carried out regarding the personality traits theoretically associated with LMX development (Nahrgang et al., 2009; Zhang et al., 2012).

Purpose of the Study

The first purpose of this study was to explore the direct relationship between personality congruence of supervisors and subordinates and affective commitment of subordinates. Here, personality congruence of supervisors and subordinates were independent variables, and affective commitment of the subordinates was the dependent variable. The second purpose of this study was to explore an indirect relationship in which LMX acts as a mediator between the personality congruence of supervisors and subordinates and affective commitment of the subordinates.

I assessed personality traits, which were the independent variables of this study, by using the BFI, which measures openness, conscientiousness, extraversion, agreeableness, and neuroticism. The LMX-7 scale measured LMX, which was the mediating variable of this study. Finally, I measured affective commitment, which was the dependent variable of this study, by using Allen and Meyer's affective commitment scale (ACS). The aim of this study was to show that reciprocity can also be affected by personality traits laid upon the organizational context. In addition, social exchange is influenced not only by the material and nonmaterial goods that are reciprocated, but also to some extent by dispositions to view the world in a particular way.

Also, Mardanov et al. (2008) and Volmer et al. (2011) have examined how supervisors' and subordinates' perceptions of LMX influence their work outcome. However, the mediating role of LMX perceptions on the relationship between the congruence of the Big Five personality traits of supervisors and subordinates and affective commitment of subordinates had not yet been studied. The aim of this study was to fill this gap.

Research Questions

The first research question of this study was designed to measure the direct relationship between the congruence of the Big Five personality traits and affective commitment of subordinates. Thus, the hypotheses were organized to show each of the Big Five personality traits as sub-hypotheses. The second research question of this study was designed to measure the mediating affect of LMX perception of subordinates between the congruence of the Big Five personality traits of supervisors and subordinates and affective commitment of subordinates. Thus, I analyzed each of the Big Five personality traits as sub-hypotheses.

RQ1 (Quantitative): Is there a significant relationship between the congruence of the Big Five personality traits and affective commitment of subordinates?

H₁: There is a significant relationship between the congruence of the Big Five personality traits of subordinates and supervisors and affective commitment of subordinates.

H_{1A}: There is a significant relationship between the congruence of the openness personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{1B}: There is a significant relationship between the congruence of the conscientiousness personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{1C}: There is a significant relationship between the congruence of the extraversion personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{1D}: There is a significant relationship between the congruence of the agreeableness personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{1E}: There is a significant relationship between the congruence of the neuroticism personality trait of supervisors and subordinates and affective commitment of subordinates.

RQ2 (Quantitative): Will LMX mediate the relationship between the congruence of the Big Five Personality traits of supervisors and subordinates and affective commitment of subordinates?

H₂: LMX will mediate the relationship between the congruence of the Big Five Personality traits of supervisors and subordinates and affective commitment of subordinates.

H₂A: LMX will mediate the relationship between the congruence of the openness personality trait of supervisors and subordinates and affective commitment of subordinates.

H₂B: LMX will mediate the relationship between the congruence of the conscientiousness personality trait of supervisors and subordinates and affective commitment of subordinates.

H₂C: *LMX* will mediate the relationship between the congruence of the extraversion personality trait of supervisors and subordinates and affective commitment of subordinates.

H₂D: LMX will mediate the relationship between the congruence of the agreeableness personality trait of supervisors and subordinates and affective commitment of subordinates.

H₂E: LMX will mediate the relationship between the congruence of the neuroticism personality trait of supervisors and subordinates and affective commitment of subordinates.

Theoretical Background

The LMX theory is distinguished from other leadership theories by its focus on the dyadic relationship between a leader and a member (Dansereau, Grean, & Haga, 1975). Unlike traditional theories that explain leadership as a function of the personal characteristics of a leader, situational factors, or interactions between the two, LMX is unique in its adoption of the dyadic relationship as analysis. According to LMX theory, the quality of the relationship that develops between a leader and a follower is predictive of outcomes at the individual, group, and organizational levels

of analysis. Dyadic relationship development is grounded in social exchange theory and the theory of reciprocity. The theory of social exchange and reciprocity is based on the claim that if a subordinate perceives a leader's support, then that individual feels the obligation to reciprocate by trying to be an effective employee regarding work-related performance (Ilies, Nahrgang, & Morgeson, 2007; Kamdar & Van Dyne, 2007). In addition, if a supervisor perceives efficient work-related performance from an employee, the leader feels the urge to be reciprocal towards the subordinate.

Oren, Tziner, Sharoni, Amor, and Alon (2012) investigated the associations between the similarity of the Big Five personality traits of the supervisors and subordinates, organizational citizenship behaviors (OCBs), and work outcomes. Oren et al. (2012) said that "OCBs were found to be related to LMX and organizational justice. In addition, LMX was found to mediate the relationship between organizational justice and OCBs. Contrary to expectations, a negative correlation was found between personality similarity and LMX" (p. 479). Also, Sears and Hackett (2011) explored the relationship between personality similarity and perceived LMX quality, and concluded that affective processes and role clarity mediates this relationship. I will explore LMX theory and its relation to the research questions of this study further in Chapter 2.

Nature of the Study

I employed a cross-sectional nonexperimental quantitative correlational research design in this study to explore the direct relationship between personality congruence of supervisors and subordinates and affective commitment of subordinates. In addition to identifying the direct relationship between identified

variables, I used a quantitative structural equation model to explore an indirect relationship in which LMX acts as a mediator between the personality congruence of supervisors and subordinates, and affective commitment of the subordinates.

According to Creswell (2009), a quantitative approach is one in which the investigator employs strategies of inquiry such as experiments and surveys and collects data on predetermined instruments that yield statistical data. I utilized a cross-sectional study because I collected the data in this study at one point in time using the online survey tool SurveyMonkey. I deemed that a nonexperimental approach was appropriate for the study because there were no intervention or treatment variables involved in the study. In terms of research design, a correlational research design was appropriate because the purpose of the study was to examine potential relationships between identified variables. The correlational research design was appropriate for investigating whether an increase in the numerical value of the independent variable would result in a corresponding increase or a decrease in the numerical value of the dependent variable. For the purpose of this study, the independent variables were the five subscales of personality traits as measured through the BFI, while the dependent variable was affective commitment, measured through the ACS. LMX perceptions of subordinates were the mediating variable in this study, measured with the LMX-7 scale.

I gathered the data from three major technopolises, or technology science parks, in Ankara. A technopolis is defined as a technology science park which includes facilities designed and managed to develop innovative technology. There are 633 companies in ODTU, Hacettepe, and Bilkent technopolises. ODTU is the Turkish

abbreviation for Middle East Technical University (METU). The technopolis for METU is called METUTECH. I contacted the companies via their HR departments. I sent prospective participants an email invitation to participate in the study. The email invitation contained a description of a brief background of the study, as well as the role of the participants in the study. I also included an informed consent form. I directed those who agreed to participate in the study to the survey in SurveyMonkey. I prepared and analyzed the collected data in the SPSS v21.0 software program and SPSS AMOS program. Correlation analyses as well as structural equation modeling (SEM) addressed the research questions in this study.

Operational Definitions

Affective commitment. Affective commitment is one of the three dimensions of organizational commitment, aside from normative and continuance commitment, and refers to “the employee’s emotional attachment to, identification with, and involvement in the organization and its goals” (Matzler, Renzl, Mooradian, von Krogh, & Mueller, 2011, p. 298).

Agreeableness. Agreeableness, which is one of the facets of the Big Five personality traits, refers to establishing positive interactions with other people. According to Templer (2012), agreeable individuals carry traits such as “warmth, trust, courtesy, and cooperativeness” (p. 118).

Big Five personality traits. Big Five personality traits have been studied in early 1970s. McCrae and Costa (1985) carried out factor analyses in order to determine the most common personality traits and concluded that openness, agreeableness, conscientiousness, neuroticism, and extraversion can be considered

five powerful personality factors and these factors also include many subconstructs of personality as well.

Congruence. In this study, the word was used interchangeably with the word “similarity.” Congruence means being compatible and in harmony (Bernierth et al., 2007, 2008).

Conscientiousness. Conscientiousness, which is one of the constructs of the Big Five Personality traits, refers to individuals who move beyond the work expectations like hard-working, punctual, knows and behaves responsibly, well-organized, self-driven, and determined (Lv, Shen, Cao, Su, & Chen, 2012, p. 1294).

Extraversion. Extraversion is one of the traits of the Big Five Personality model, and refers to active people who are sociable, talkative, and assertive (McCabe & Fleeson, 2012). According to Greenberg (2011), extraversion can also be defined as the quality of a person to be optimistic, easy to communicate, and prefer excitement and enthusiasm to stability.

Leader-member exchange (LMX). According to Walumbwa et al. (2011), LMX can be defined as “the quality of exchange between a supervisor and an employee” (p. 204). LMX is the degree of affective support and the interchange of worthwhile resources between the subordinate and supervisor (Erdoğan & Bauer, 2014).

Neuroticism. Another term for neuroticism is emotional stability. According to Bowling, Burns, Stewart, and Gruys (2011), neuroticism can be defined as the “extent to which one experiences negative emotions (e.g., anger, anxiety, frustration, depression) across a wide range of situations” (p. 321).

Openness. Another construct of the Big Five Personality traits is openness, which can be characterized by “open-mindedness, tolerance, curiosity, inquisitiveness, and the willingness to accept new experiences” (Wu & Hu, 2013, p. 960). In addition, open individuals are always eager to be a part of a change process, not feeling intimidated by novel situations.

Assumptions

This study was based on a number of assumptions. The first was that the congruence of the Big Five personality traits and affective commitment of the subordinates are positively correlated. In addition, it was assumed that LMX mediates the relationship between personality congruence of supervisors and subordinates and affective commitment of the subordinates.

It was assumed that the BFI questionnaire is the appropriate tool to measure the intended constructs. The BFI measures five personality traits: Openness, agreeableness, conscientiousness, neuroticism, and extraversion, which were also the independent variables of the study. It was also assumed that the ACS measures the affective commitment of employees through this self-administered questionnaire. Moreover, it was assumed that the LMX-7 scale is the appropriate tool to measure the mediating construct. It was assumed that all of the surveys questions would be answered truthfully and honestly by the respondents of the study. Another assumption was related to the supervisor-subordinate dyads which formed the foundation of this study. It was assumed that supervisor-subordinate dyads are representative of the population from which they were selected.

Limitations and Delimitations

In this study, I focused on the mediating role of LMX perceptions of subordinates on the relationship between the personality congruence of supervisors and subordinates and affective commitment of the subordinates working as full-time employees in three technopolises in Ankara. One limitation of this study concerned subordinate bias and the fact that all the questionnaires were self-reported. The self-reported nature of the questionnaires limited the study regarding the honesty and the researcher's understanding of participants in the study.

One of the delimitations of this study was related to the voluntary nature of the research. The participants represented only the subordinate-supervisor dyads who voluntarily agreed to be a part of this study. In addition, because this study was conducted in Ankara, using supervisors and subordinates from three technopolises, the findings of the study are limited in terms of generalizability to cities in Turkey. Another limitation of this study pertained to the information gathered from the respondents. Although I analyzed the personality traits from two perspectives (the subordinates' and supervisors' perspectives), I only analyzed LMX perceptions and affective commitment from the subordinates' point of view.

Significance of the Study

This study's significance is threefold: (a) advancing theory, (b) advances in practice, and (c) positive social change. In terms of advancing theory, this study will fill the gap in the literature regarding the relationship between the congruence of personality traits of supervisors and subordinates and affective commitment. Bernerth et al. (2007, 2008) also proposed that further research should be carried out

investigating the mediating role of LMX on the relationship between personality congruence of supervisors and subordinates and affective commitment of subordinates. Apart from Bernerth et al. (2007, 2008), Mardanov et al. (2008) and Volmer et al. (2011) have suggested further inquiries about LMX perceptions of supervisors and subordinates and work outcomes. Thus, the aim of this study was to advance the research on personality congruence, LMX perceptions, and affective commitment. If the congruence between the personalities of the subordinates and supervisors predicted the perceptions of LMX, it would contribute to the existing literature by showing that dispositions influence the formation of LMX perceptions of supervisors and subordinates.

In terms of advancing practice, this study has practical significance for companies. If a company knows the personality traits of a supervisor, then a subordinate who has the same personality traits can be placed under this supervisor in order to achieve harmony between them, and thus increase work efficiency. The lack of a match between the supervisor and a subordinate might interfere with the formation of LMX, which might lead to dissatisfaction and poor performance of the employees and a corresponding decrease in the organization's efficiency in return (Bernerth et al., 2008; Volmer et al., 2011).

Another practical implication of this study for organizations is it will raise awareness about the significance of dispositions and their influence on perceptions of LMX. Being aware of the importance of the congruence between personality traits of the supervisors and subordinates may help the supervisors and subordinates to work through any difference or incongruence that may affect the organizational exchange.

Understanding the mediating effect of LMX on the relationship between personality congruence and affective commitment contributes to social change by highlighting the importance of social relationships at work, and how these relationships impact employees' affective commitment to the organization.

In addition, a second implication for social change is the possibility of developing or fostering awareness of the personality, and its probable impact on the work related outcomes. A number of executive training centers, such as the Center for Creative Leadership, already include personality awareness in their study plans. It is possible that managers and employees can work through differences if they are aware that these differences may play a role in affective commitment, which affects job satisfaction, absenteeism, and turnover of employees. For example, managers may have to expend greater effort to build high-quality working relationships by spending more time with employees, being more open to employee communications, and offering greater personal support (Vecchio & Brazil, 2007). Scandura and Graen (1984) said that "LMX leadership intervention that translated into a 19% improvement in productivity and an estimated annual cost savings of more than US \$5 million" (p. 435). It appears personality awareness and the influence it may have on workplace exchanges seems to be a practical and relevant result of that study.

Summary

As a process, various factors influence LMX, directly or indirectly. One of the factors influencing LMX is personality. The personal characteristics of leaders and members may create variances between the interaction of supervisors and subordinates, and thus may have a significant influence on this exchange (Bernerth et

al., 2007, 2008; Dienesch & Liden, 1986). Earlier studies on LMX fall into two categories: Antecedents and consequences. Generally, investigators focus on leader and member features and behavior types while evaluating the antecedents of LMX (Bernerth et al., 2007, 2008; Bhal, Ansari, & Aafaqi, 2007; Erdoğan & Bauer, 2014; Nahrgang et al., 2009). Conversely, the consequences of LMX were mostly related to outcomes such as organizational commitment, job satisfaction, and job performance (Manogram & Conlon, 1993; Mardanov et al., 2008). For example, Aryee and Chen (2006) found that the quality of LMX influences job performance. LMX was also found to influence job satisfaction (Dansereau et al., 1975; Dunegan, Uhl-Bien, & Duchon, 2002; Epitropaki & Martin, 2005), and organizational commitment (Ahmed, Ismail, Amin, & Ramzan, 2013; Martin et al., 2005). The antecedents of LMX were found to be variables such as personality, locus of control, leadership styles and resources.

Thus, the first aim of this study was to evaluate LMX perceptions of subordinates as a mediator on the relationship between the personality traits of subordinates and supervisors and affective commitment of subordinates. The second aim of this study was to test the direct relationship between the personality congruence of supervisors and subordinates, and affective commitment of the subordinates. Gathering data related to personality from both the supervisors and subordinates enriched the scope of this study and organizational psychology studies.

In Chapter 2, I will include a discussion of the literature on personality trait theories, the Big Five personality traits, and the significance of personality congruence of supervisors and subordinates. Following that, I will analyze LMX

theory by taking into regard the dimensions and constructs of the theory. Also, I will explain organizational commitment models and the significance of affective commitment. I will evaluate the similarity-attraction paradigm in the context of the interaction between LMX perceptions of subordinates and affective commitment and interactions between personality congruence of supervisors and subordinates on affective commitment of subordinates.

Chapter 3 contains the proposed methodology of the study, including the research design, target population, sampling procedures, and instrumentation. It also contains the proposed data collection methods, together with data analysis. I will use the proposed methodology presented in Chapter 3 to analyze the data gathered from supervisors and subordinates in Turkey.

Chapter 2: Literature Review

Introduction

This research related to previous investigations by connecting theories of personality, LMX, and affective commitment based on traditional and current studies. In order to explore the mediating effect of LMX on the relationship between personality traits and affective commitment, I gathered data through multiple sources, namely, the responses of supervisors and subordinates. By using the personality congruence of supervisors and subordinates as independent variables, this research was responsive to calls for such in the existing literature. Specifically, this study advances the literature by proposing that LMX mediates the relationship between personality congruence and affective commitment.

There is a large body of literature related to the antecedents and consequences of LMX. As Oren et al. (2012) mentioned, organizations might facilitate positive work-related outcomes by improving LMX relationships. In addition, supervisors may consider forming high-quality LMX relationships with subordinates who are dissimilar to them in their personality. As Sears and Hackett (2011) indicated, few researchers have investigated how the personality of leader and follower relate to positive work-related outcomes such as affective commitment to the organization.

The purpose of Chapter 2 is to investigate the existing literature by focusing on the personality theories that lead to the well-accepted Big Five personality traits model. I will fully explore LMX theory and its dimensions, and investigate affective commitment, a construct of organizational commitment. Next, I will show the link between the main variables of this study based on the literature. I will review

personality congruence as an antecedent of LMX and affective commitment as a consequence of LMX in detail. Because there is a gap in the existing literature regarding the mediating role of LMX between personality congruence and affective commitment of the subordinates, I proposed that LMX acts as a mediator between personality congruence and affective commitment. In addition, I will explain the measurement tools used to test the hypotheses of this study.

I used various techniques for the literature review. Because I have access to the Bilkent University database where I am currently employed, together with the Walden University database, I had access to many academic articles. Additionally, I used the Google Scholar search engine, especially at the beginning of the research process for broad searches. Initially, I used *personality*, *personality congruence*, *personality traits*, *leader-member exchange*, and *organizational commitment* as key words to search the databases. In order to explore the personality theories and LMX theory, I did not set a specific year while I made the searches. However, after gathering sufficient sources in a broad sense, I decided to focus on the last five years as of the time of data collection (2010-2015).

I predominantly used the EbscoHost database, where I had access to many other databases such as PsycINFO and PsycARTICLES. For example, in the Walden University dissertation database, there are no studies that include personality congruence. Therefore, I decided to use the term *personality similarity*, hoping I would achieve more results, but still there were no dissertations at Walden University related to this topic. The same was also true with academic journal articles, both peer-reviewed and seminal literature. The situation was rectified by taking advantage of the

few studies that focused on personality congruence and LMX perceptions. As a result, I concluded that personality congruence in particular is a topic that researchers need to develop, analyze, and explore further.

Theoretical Foundation

Leader-Member Exchange Theory

LMX theory is considered as one of the most interesting theories about the leadership process and its consequences studied in organizational leadership field (Gerstner & Day, 1997). LMX theory was first name as “vertical dyadic linkage” by Dansereau, Graen, and Haga (1975), and focused on the reciprocal interaction between the leader and follower in terms of a dyadic relationship. LMX theory is about how a supervisor develops one-on-one relationships with subordinates by proposing that not every supervisor demonstrates the same leadership style to each subordinate. According to LMX theory, by taking into consideration their relationship with subordinates, the supervisor avoids demonstrating a single type of leadership. Supervisors categorize their relationship with the subordinates as in-group and out-group relationships. This categorization is based on the identification and perception skills of the supervisor. According to LMX theory, the supervisor’s relationship and interaction with each member in a work group are unique in their nature. First impressions help to give ideas about the other party. Thus, if this first impression was positive, a supervisor would support that subordinate by assigning meaningful and important tasks to the subordinate.

In LMX theory, supervisor-subordinate relationships are evaluated as a kind of social contract. The relationship develops in an unofficial way, and thus creates a role

exchange. The efficiency of the supervisor depends on the quality of the relationship constituted with each subordinate. LMX is distinguished from other leadership theories through its focus on the dyadic relationship between a leader and a member (Dansereau et al., 1975). Unlike traditional theories that seek to explain leadership as a function of personal characteristics of the leader, situational factors, or an interaction between the two, LMX is unique in its adoption of the dyadic relationship as the level of analysis.

According to LMX theory, the quality of the relationship that develops between a leader and a follower is predictive of outcomes at the individual, group, and organizational levels of analysis. Dyadic relationship development is grounded in social exchange theory and the theory of reciprocity. Social exchange theory and reciprocity can be used to help explain that if a subordinate perceives leader support, then that individual feels the obligation to reciprocate by trying to be an effective employee (Ilies et al., 2007; Kamdar & Van Dyne, 2007). In addition, if a supervisor perceives efficient work-related performance from an employee, the leader feels the urge to be reciprocal towards the subordinate.

According to Robbins and Judge (2013), LMX theory suggests that in the early phases of the supervisor-subordinate relationship, the supervisor has the tendency to implicitly categorize the subordinate as likable or not likable, which is almost always constant. LMX theory supports the idea that the supervisor seeks out ways to reward the subordinates who are likable, and penalize those who are unlikable. However, in order for the Leader member exchange to continue, both parties (supervisor and subordinate) should contribute to the relationship

simultaneously. Although there is no clear-cut categorization about the supervisor's decision to choose who to like and who not to like, the researches shows that demographics, attitude, and personality similarities of the subordinate and supervisor influence the outcome (Bernerth et al., 2007, 2008; Green, Craven, Scott, & Gonzales, 2006; Niedle, 2012; Yuan & Jian, 2012). Gender similarity also influences the likelihood of the development of LMX relationships between supervisor and subordinate. Same gender supervisors and subordinates are inclined to have higher quality LMX relationships than different genders (Ayman, Rinchuso, & Korabik, 2004; Bhal et al., 2007; Varma & Stroh, 2001).

History and development of LMX theory. Most of the theories about leadership focus on how a supervisor should react towards the subordinates when faced with various situational factors, rather than the personality similarities or differences between the supervisors and subordinates. However, supervisors demonstrate their leadership style based on the personality similarities between themselves and the subordinates (Boies & Howell, 2006; Davis & Gardner, 2004; Kalkowski, 2005; Schriesheim et al., 2001). The theoretical basis of the LMX is based on role, social exchange, equality, and justice. The concept of 'role' in this context is a subordinate carrying out the tasks and responsibilities, depending on the position in which the subordinate is employed, in terms of roles and behaviors. This is called role theory (Erdoğan & Bauer, 2014). Social exchange, together with equality, is found to have a significant impact on the formation and development of the LMX relationship (Gupta & Krishnan, 2004). Equality is obtained through the modifications in the inputs or outputs in order to ensure the sustainability in a group. According to

Erdoğan and Bauer (2014), this relationship that develops over time is a function of an invest-acquisition cycle. In LMX theory, the subordinate's perceptions of the justice of the supervisor towards the employees and the effort put forth by the supervisor to ensure a just climate influence the development of positive relationships (Uhl-Bien et al., 2000). Hassan and Chandaran (2005) stated that organizational justice, which includes issues such as job division, pay, promotion, and work-rest cycles, influences the subordinate's attitudes towards the job and organization.

Since the inception of LMX in the 1970s, researchers in this field have agreed upon four stages related to the development of LMX. In the first stage, leaders do not act the same way toward all of their subordinates; rather, they develop various leadership styles for different employees. In the second stage, the research was focused on the various interactions the supervisor is engaged in within the workplace. The third stage is related to studies on "leadership," especially those carried out by Graen and Uhl-Bien (1995) and Uhl-Bien et al. (2000). This specific research was a cornerstone in the development of LMX theory. In this stage, the research focused on how each group member can conduct a relationship with one another in order to form a partnership. In the fourth stage, the area of practice has been shifted from dyadic relationships to larger groups.

Several factors distinguish LMX from other models that focused on the relationship of supervisors and subordinates. LMX is a descriptive model that focuses on social capital and effective relationships that are necessary for earning competitive advantage. In addition, LMX-related practices are found to be significant in realizing organizational targets. The researchers concluded that there is a positive correlation

between LMX model and organizational citizenship, job satisfaction, job performance, organizational change, and other similar organizational components (Erdoğan & Bauer, 2014).

Dimensions of LMX theory. According to researchers, there are several dimensions of the relationship between the supervisor and the subordinate (Erdoğan & Bauer, 2014; Piccolo, Bardes, Mayer, & Judge, 2008; Schaubroeck & Lam, 2002; Steven & Ash, 2001). According to Uhl-Bien et al. (2000), respect, trust, and mutual obligation can be considered the basis of LMX relationship between a supervisor and subordinate. Dienesch and Liden (1986) named contribution, commitment (loyalty), and affect as the types of relationship exchanges, which help to establish highly qualified leader-member exchange. Finally, Liden and Maslyn (1998) suggested the inclusion of “professional respect” to the dimensions listed by Dienesch and Liden (1986).

Contribution dimensionality of LMX is the most agreed upon factor by the researchers who attempt to explain the relationship between the supervisor and a subordinate. Thus, ‘contribution’ should be defined in terms of the tasks and responsibilities carried out by the subordinate. Subordinates who show high job performance and are willing to cooperate with their supervisors demonstrate a high quality LMX relationship with their supervisor. Because of this, resources of the organization are directed to that subordinate by the supervisor. These resources are physical sources (e.g., bigger office, more up-to-date technological equipment), important work-related information, and appealing job descriptions (Liden & Maslyn, 1998). Subordinates who receive these resources, together with the support from their

supervisors, keep on increasing their job performances. In addition, subordinates engaged in high quality LMX relations with their supervisors often exhibit performance beyond what is stipulated in their job contract. Therefore, one of the significant factors that determine LMX relationships is how well a subordinate carries out the assigned tasks and responsibilities (Schaubroeck & Lam, 2002).

In the job-related evaluations, the most important point is that the member, or the member candidate, should internalize the mission and vision of the organization, and thus feel responsible for realization of these aims, should complete the tasks given to them, and protect and use the resources of the company efficiently (Erdoğan & Bauer, 2014). According to Dienesch and Liden (1986), contribution, as a dimension of LMX, is about each member's voluntary and qualified efforts to realize the implicit and explicit targets of the organization. When a subordinate contributes to the realization of the organizations' mission and vision by showing effort, and when a supervisor supports these efforts by providing necessary resources, both parties benefit from this exchange (Davis & Gardner, 2004).

As Erdoğan and Bauer (2014) mentioned, another dimension of LMX theory—commitment—plays an important role in the foundation and development of LMX by focusing on the mutual loyalty principle. When one party is loyal to the other, it shows support for the job-related activities and character of the other party. Commitment is evaluated as an outcome of the LMX quality. Commitment issues help the supervisor to determine the types of tasks and responsibilities to be given to the subordinate. Supervisors assign tasks that require independent decision-making and responsibility to the subordinates who are most committed to the organizational

goals (Dienesch & Liden, 1986). This helps the subordinate to feel more powerful. High quality LMX relationships in an organization increase the commitment level of the members to the organization, and as a result, subordinates' performance, efficiency; leader performance also increases (Schriesheim et al., 2001).

Affect, another dimension of LMX, refers to the mutual influence that subordinates and supervisors have upon each other, which is similar with the "liking" dimension put forward by Schriesheim et al. (2001). Mutual liking of supervisors and subordinates is expected to positively influence LMX relations (Erdoğan & Bauer, 2014). As Dienesch and Liden (1986) proposed, the quality of the LMX relationship between subordinates and supervisors may vary based on gender, age, educational background, and personality traits. In this exchange, the response given to the supervisor's decision by the subordinate shows variations on the dimensions of LMX, contribution, commitment, affect, and professional respect.

Respect, in general terms, can be defined as the positive feelings of attentiveness and affection towards somebody, or something, based on the value and sanctity of that person or thing. According to Uhl-Bien et al. (2000), professional respect is about the opportunity given to individuals to show their technical, personal, and professional skills. Professional respect is the perception of professional recognition of a member about the wideness of career-related capabilities by other members of the organization. This perception is based on the previous achievements, experience, feedbacks, and rewards of that member. Thus, it is possible to form a perception of professional respect towards a member without even meeting that person (Uhl-Bien et al., 2000). One thing that should be taken into consideration

about the dimensions of LMX is that it can be developed even in distant relationships. A supervisor with a positive reputation would create a favorable impression even for the subordinates not working with that person.

In this study, LMX theory was the theoretical basis due to the aforementioned factors. At first, LMX theory focused on the nature of the relations leaders formed with their followers. Later, LMX theory focused on how leader-member relationship (LMX) was related to organizational effectiveness. Among the widely-researched topics are the quality of the leader-member relationship and its effects on job attitudes; and Mardanov et al. (2008) found that the quality of LMX in the workplace can often affect the entire structure and success of the organization.

Big Five Personality Traits

The five-factor model (FFM) was developed in order to address inadequacies in the Myer-Briggs Type Indicator (MBTI; Costa & McCrae, 1985). The first studies about the FFM were in the 1960s (Tupes & Christal, 1961) and continued into the 1990s (Costa & McCrae, 1995; Goldberg, 1990, 1992) because the model was accepted as a new paradigm in personality research. The FFM has created a revolutionary path in the field of personality psychology and has proven to be valid and reliable in many research studies (Allik, Realo, & McCrae, 2013; McAdams, 1992; McCrae & Allik, 2002; McCrae & Costa, 1987; Wiggins, 1996). Judge and Bono (2000) described FFM as an information store that defines human personality traits with all of its dimensions.

Psychologists such as Klages (1926) and Allport and Odbert (1936) assumed that language is the ultimate source of an individual's attitudes, and they used this

assumption to create a scientific taxonomy. By evaluating the terms related with personality traits in the dictionary, researchers developed a new point of view related with the words themselves (John, 1989, 1990; John, Angleitner, & Ostendorf, 1988; Saucier & Goldberg, 1996). Allport and Odbert (1936) conducted a study about the terms in the English dictionary that separate one individual's behavior from those of another. Allport and Odbert (1936) came up with 17,953 individual traits in this list. However, organizing all these traits in a specific taxonomy was difficult, and personality psychologists struggled with this issue for more than 50 years (John, 1989; 1990). Allport and Odbert (1936) tried to create a psycholexical taxonomy about which type of traits should be included in the dictionary, and decided on four specific categories. The first category includes personality traits such as social, aggressive, timid, and restless, which show the general and personal tendencies while trying to adapt to the social environment. Unlike the stable dispositions listed in category one, in the second category, Allport and Odbert (1936) included temporary moods, attitudes, emotions such as fear, happiness, enthusiasm, and the like. The third category included evaluation of individual's judgments of personality, such as 'perfect', 'average', 'valuable', and 'annoying'. These terms are based on the assumptions that reflect the inner traits of an individual, rather than what society in general, or other people think about that individual. The fourth category in Allport and Odbert's (1936) lexical hierarchy includes an individual's physical traits, capacity and skills, ambiguous terms related with the personality, and all other traits that do not fit the previous three categories.

All of these lexical studies helped with the creation of a personality traits dictionary that people used in their daily interactions and conversations (Goldberg, 1981). This dictionary set the basis for future lexical studies based on personality. Norman (1967) later classified Allport and Odbert's (1936) taxonomy into seven categories: stable biophysical traits, temporary states, activities, social roles, social influences, evaluation terms, and anatomical and physical terms. However, when the categories designed by Allport and Odbert (1936) and Norman (1967) are analyzed, there is no clear-cut distinction between the categories, some overlap exists, and there are inadequacies in some of the definitions. According to Allen and Potkay (1981), there should be a more specific categorization for personality traits. Chaplin, John, and Goldberg (1988) stated that traits that belong to a specific category should be stable rather than temporary. As previously mentioned, although Allport and Odbert's (1936) categorization was the initial step to a personality dictionary, there still was a need for a systematic taxonomy that was more practical in terms of identifying and organizing the traits that separate one individual from another (John, 1989). In order to create such a multi-dimensional personality traits taxonomy, Cattell (1943) used Allport and Odbert's (1936) model as a base.

In order to measure an individual's personality as a whole, Cattell (1945) asked respondents to evaluate a person they knew based on the words and terms created by Allport and Odbert (1936). Because the list is very long for the aim of the research, Cattell (1943) first started to analyze 4,500 words that explain traits. Cattell (1943) had decreased these 4,500 traits into 35 variables by using both semantic and empirical clusters. This process helped to eliminate 99% of Allport's (1936) lexical

terms. By using these 35 variables, Cattell conducted factor analysis on the findings and identified 12 factors into which traits fell. The 12 personality factors became the part of Cattell's (1945) 16 personality factors (16 PF). By adding four factors that Cattell assumed should be a part of the personality factors, Cattell developed the 16 PF approach and questionnaire (16 PF-Q) (Cattell, Eber, & Tatsuoka, 1970). The 16 PFQ measures 16 basic personality traits in terms of five general personality inclinations. The test consists of a single form and 185 questions. The 16 basic personality traits in the model are warmth, reasoning, emotional stability, dominance, liveliness, rule conscientiousness, social boldness, sensitivity, vigilance, abstractedness, privateness, apprehension, openness to change, self reliance, perfectionism, and tension (Cattell et al., 1970).

Cattell et al. (1945) believed that 16 personality factors acted as a perfect transmission between individual reporting, being evaluated by others, and being used in objective tests. However, Becker (1960) and Nowakowska (1973) did not fully accept Cattell's assumptions (Becker, 1960; Nowakowska, 1973). When Cattell (1943; 1945) analyzed the correlation matrix designed by him, others did not validate the number and structure of the mentioned factors (Borkenau & Ostendorf, 1990; Tupes & Christal, 1961). In addition, Digman and Takemoto-Chock (1981) stated that Cattell's (1943) original model contains mistakes.

Hans Eysenck (1953) proposed that a factor analysis technique should be used in personality research, just like Cattell (1945). Eysenck's (1953) personality theory is based on biological factors, and has very strong psychometric features. According to Eysenck (1953), although basic personality traits are mostly determined by genetics,

interaction with the environment also influences the attitudes and behaviors of an individual.

Eysenck (1953) suggested three dimensions, which were later called “types,” that can explain personality traits after conducting a factor analysis. The three personality dimensions Eysenck (1953) mentioned are extraversion, neuroticism, and psychoticism, all of which have opposite anchor terms. The extraversion trait has extraversion at one pole and introversion on the other; neuroticism has emotional instability at one pole and emotional stability on the other; and psychoticism has psychoticism at one pole and superego power on the other (Eysenck & Eysenck, 1985).

According to Eysenck (1992), persons defined as extraverted are social, initiative, talkative, leaders, and activists. In contrast, introverts are passive, quiet, and anti-social. Neurotic people are rigid, insecure, easily distracted, aggressive, and excitable, whereas emotionally stable people are calm, peaceful, reliable, and even-tempered (Eysenck, 1992).

Eysenck (1992) included psychoticism after extraversion and neuroticism dimensions. Figure 1 presents Eysenck’s two-dimensional personality typology (Eysenck & Eysenck, 1985). People who score higher on psychoticism are egoists, impulsive, inconsiderate, aggressive, intolerant, and have no respect for other people’s rights. Conversely, people who score lower on the psychoticism dimension are calm, cooperative, and helpful.

INTRA VERT	HIGH NEUROTICISM		EXTRA VERT
	Emotional (Melancholic)	Aggressive (Chloric)	
	Moody Anxious Rigid Pessimistic Reserved Unsociable Quiet	Touchy Restless Aggressive Excitable Changeable Impulsive Optimistic	
	LOW NEUROTICISM		
	Phlegmatic	Sanguine	
	Passive Reliable Even-tempered Peaceful Thoughtful Careful Reliable Quiet	Leader Carefree Lively Talkative Responsive Practical Easy going	

Figure 1. Eysenck's Two-Dimensional Personality Typology (Eysenck, H. J., & Eysenck, M. W. (1985). *Personality and individual differences: A natural science approach*. New York, NY: Plenum).

A significant issue about Eysenck's (1992) typology is that there is no correlation among the extraversion, neuroticism, and psychoticism dimensions. This is the reason why an individual who falls into one dimension may score higher or lower on the other two dimensions (Harrigan, Harrigan, Sale, & Rosenthal, 2011; Modgil & Modgil, 2012). Cattell's (1945) model of personality and the emergence of the possibility for working with fewer personality variables have also given rise to

studies about traits. Fiske (1949) used more simple and plain definitions for Cattell's (1945) 35 variables. In order to explain Fiske's (1949) factors further, Tupes and Christal (1961) reanalyzed the correlation matrixes for eight different sample groups, which contain wide variations of people, from pilots to high school graduates. Tupes and Christal (1961) encountered five dimensions that are more strong and repetitive than other factors. These five personality factors proposed by Tupes and Christal (1961), based on Cattell's 35 variables, were later confirmed in several studies (Borgotta, 1964; Digman & Takemoto-Chock, 1981; Norman, 1963).

As previously mentioned, Norman (1963) analyzed Tupes and Christal's (1961) study and came up with the same FFM of personality. From Tupes and Christal's (1961) analysis, Norman (1963) selected four variables from each of the five factors' highest factor incidents and concluded that in all samples, the same five main factors contain all sub-dimensions of personality traits. These five personality factors are:

1. Extraversion: talkative, assertive and energetic – introversion on the other pole;
2. Agreeableness; good-tempered, cooperative and reliable – antagonism on the other pole;
3. Conscientiousness: organized, responsible – irresponsibility on the other pole;
4. Emotional stability: calm, relaxed, easy-going – neuroticism on the other pole;

5. Openness: being open to new experiences, curiosity, kind, intelligent, and independent – conservatism on the other pole.

These factors constitute the content of the FFM. As Goldberg (1981) suggested, the structure in the FFM does not claim that personality can be reduced to only five traits. Each of the five dimensions includes many significant personality traits within themselves. As Allik et al., (2013), Block (2010), and Carroll (2002) agree, the five factor personality dimensions should be regarded as an outcome of natural language analysis that people use while explaining themselves and other people around them, rather than representing a specific theoretical point of view. This model simply sets a general framework that can be accepted by everyone, and instead of replacing the previous studies, brings a holistic point of view.

Research about five factor personality traits slowed down during the 1970s and 1980s. However, by the middle of the 1980s, the number of studies increased. Botwin and Buss (1989), Conley (1985), Field and Millsap (1991), Goldberg (1981, 1990), McCrae and Costa (1985, 1987) Peabody and Goldberg (1989), and Saucier and Goldberg (1996) used the five factors in the model by using different sample groups. These studies also sought ways to measure five factor model of personality.

Wiggins (1995) developed the Interpersonal Adjective Scale by adding adjective assessments to the FFM. This scale has both high reliability and is in line with other scales. German and American linguists conducted several studies in order to get rid of any possible translation mistakes. Goldberg (1999) also developed the International Personality Item Pool (IPIP) that includes 1,452 items, on which the validity and reliability tests were conducted. Hofstee, Kiers, De Raad, & Goldberg

(1997), in order to carry out empirical evaluations of factor similarity, used the translations of 126 personality-related terms in English, Dutch, and German languages. The results of the study were found to be similar to those of American-English research. In other words, in different sample groups and using various definitions of traits, all end up in five factors that are the same five factors revealed in the studies conducted in English. However, the fifth factor in Dutch was not the same as the 'openness' factor in English (being open to new experiences and using imagination). This fifth factor in Dutch was revealed as being unofficial and comfortable. Researchers analyzed five factor personality traits in different languages, including Italian (De Raad, Perugini, Hrebickova, & Szarota, 1998), Chinese (Yang & Bond, 1990), Turkish (Somer & Goldberg, 1999), Russian (Shmelyov & Phil'ko, 1993), and Hebrew (Almagor, Tellegen & Waller, 1995).

As research about personality traits continued, the need to create a holistic measure to assess personality based on survey results remained. In order to satisfy this need, Costa and McCrae (1985) created a model in which they conceptualized three main categories of personality traits. These categories are emotional unstableness (N: Neuroticism), extraversion (E: Extraversion), and openness to new experiences (O: Openness). This model was named as NEO Personality Inventory (NEOPI). According to Costa and McCrae (1985), NEO PI can clearly define the personality traits mentioned in previous studies (Cattell et al., 1970; Eysenck, 1961; Guilford, Zimmerman, & Guilford, 1976) in the three categories mentioned. Moreover, the aforementioned empirical findings of the 16 personality factors (16 PF) personality

analyses support the three-dimensional factor model (Costa & McCrae, 1976, 1980; Costa et al., 1980).

Costa and McCrae's (1985) NEO model, however, included only the three of the five factor personality traits, by disregarding the conscientiousness and agreeableness factors. Later, researchers developed the NEO PI-R (Revised NEO Personality Inventory) model with 240 items (Costa & McCrae, 1992). In NEO PI-R, there are six personality traits related to five factor personality traits (Costa & McCrae, 1992). Therefore, there are five categories, with 30 subcategories in which the individuals evaluate the frequency of each trait, rather than being forced to choose between the two polar traits. The model uses normative assessment scale. Because NEO PI is a long assessment tool and takes a significant amount of time to complete, Costa & McCrae (1992) later developed a simplified model with 60 items (60-item NEO FFI), which has a high level of correlation with NEO PI-R and has a 0.78 reliability coefficient.

The major criticism of NEO PI-R concerns the practice area of the inventory. The NEOPI-R (Costa & McCrae, 1992), like the 16 PI (Cattell, 1945), was designed and used for clinical purposes, or non-work related personality assessments. In contrast, the FFM acts as a vocational tool in order to transfer theory into practice.

John et al. (1991) developed the BFI, composed of 44 items, in order to assess five factor personality traits in their research. When compared to previously mentioned inventories, BFI (John et al., 1991) is easier to use and is an effective assessment tool. The 44 items in the inventory are short, simple, and easy to understand. There are many advantages to using short scales like BFI (Hahn,

Gottschling, & Spinath, 2012), because they save time and prevent the respondents from becoming uninterested. It takes about five minutes to complete BFI, whereas it may take about fifteen minutes to complete NEOPI-R, or NEO FFI.

Currently, the literature is dominated by the FFM in personality traits research. Especially during the last several decades, the FFM is used for recruitment, selection, and evaluation of the employees (Black, 2000; Oswald & Hough, 2011; Zheng & Houchan, 1999). The personality factors in the FFM are known as traits that can influence success within a wide range of roles, such as sales, customer services, and management (Carraher & Cash, 2009; Howard & Howard, 2010; Judge & Bono, 2000; Lee, 2012). According to Salgado (2003), in terms of job performance and other organizational behaviors, trait measurements in the FFM are much higher compared to other inventories. The FFM can be considered as a common framework for practitioners and researchers to reveal interpersonal differences.

The FFM was accepted as a fundamental paradigm for further personality research since 1980s. However, some, including Eysenck (1992), Hough (1992), McAdams (1992), and Veselka, Just, Jang, Johnson, and Vernon (2012) questioned the validity of the FFM. The major issue was the researcher's concern about the uniqueness of the "five factors." Therefore, Block (2010), Paunonen, Ashton and Jackson (2001) tried to find the answer to the questions such as "Which Big Five?" or "Whose Big Five?". Burger (2004) raised another criticism, which concerned the inadequacy of the model compared to the complexities and details of human personality.

In spite of the criticisms, currently there is no equivalent to the Big Five Factor model. Due to the consistency of the studies related with the model, the research mostly agreed upon the reliability of the model. In particular, the BFI developed by John et al. (1991) is defined as the prototype measurement tool for the FFM. In the following part, I will analyze the dimensions of the FFM in detail.

Extraversion. Extraversion is the factor that shows the degree of comfort an individual has while interacting with other people. Introversion takes place on the other pole of extraversion. Extraverted individuals like to be organized and amicable. They enjoy the company of other people. As Saklofske, Eysenck, Eysenck, Stelmack, & Revelle (2012) explained, extraversion includes energy, sympathy, warmth, and assertiveness. As previously mentioned, each of the five factors includes several traits. For extraversion, these subcategories are decisiveness, friendliness, and assertiveness, being energetic, adventurousness, enthusiasm, and pleasantness. The subcategories of introversion include unsuitableness, indecisiveness, passiveness, and quietness (Costa & McCrae, 1995).

Extraversion assesses the degree of participation and enthusiasm an individual experiences in social environments. The individuals who score high on extraversion and spend much time in social interactions are active and high-spirited (Saklofske et al., 2012). Extraverted individuals enjoy being the center of attention and thus can easily reveal themselves in social environments and talk about their ideas. These individuals are sympathetic, talkative, lively, and cheerful. They think and act fast, and are fond of exciting activities (Smillie, Cooper, Wilt, & Revelle, 2012). The individuals who score higher in this factor are found to be experiencing positive

feelings more than the others who score lower. Extraverts are human-oriented, can take risks easily, have no problem with showing their feelings, and more inclined to change (Bowditch & Buono, 2005). According to Smillie et al. (2012), the major significance of the extraversion factor is dominance and action.

Individuals who score lower on the extraversion factor are introverts. A low score indicates that the individual spends significant time alone and prefers a less active life. These types of individuals have distant and official relationships with other people. They prefer to be alone and stay out of social environments as much as possible (Saklofske et al., 2012). Introverts tend to act slowly and seem never to be in a hurry (Watson & Clark, 1997). At the same time, introverted individuals are passive, controlled, task-oriented, shy, serious, restless, and quiet. Thus, they are reluctant to attract attention in social environments (Saklofske et al., 2012).

In terms of business context, employees who score higher on the extraversion factor seem to have a higher job satisfaction than those who score lower (Furnham, Eracleous, & Chamorro-Premuzic, 2009; Judge et al., 2002; Kumar, Bakhshi, & Rani, 2009; Peeters, Rutte, van Tuijl, & Reymen, 2006). Extraverted employees are more reactive to organizational issues such as promotion and pay (Kumar et al., 2009; Yahaya, Yahaya, Bon, Ismail, & Noor, 2012). This is in line with the assumption that extraverts are highly susceptible to rewards, whereas introverts are highly susceptible to punishments (Vearing, & Mak, 2007).

In their study, Barrick, Stewart, and Piotrowski (2002) proposed that extraversion is a very important factor for those who are employed in sales and management positions, which require high interaction with other people. Being social,

talkative, active, and attracting attention in the social environments are some of the features of extraversion. Therefore, employees who have such kind of traits would have a high job performance in the mentioned professions (Alessandri & Vecchione, 2012; Hurtz & Donovan, 2000; Rothmann & Coetzer, 2003; Zweig & Webster, 2004).

According to Smillie et al. (2012), extraverted employees tend to be a part of a team, whereas introverts prefer to work alone and be more independent. As a result of being social and taking initiative easily, extraverted employees are highly interested in social groups and activities. These employees may believe that the working environment is an opportunity to become sociable; however, they may also think that it as a factor that prevents them from spending more time with their family, friends, and hobbies (Saklofske et al., 2012). Employees who score higher on the extraversion factor enjoy being a part of new environments and various activities. Therefore, if their job is routine and monotonous, then absenteeism of these employees tends to increase (Judge, Matocchio, & Thoresen, 1997).

As well as the aforementioned organizational behaviors, Dean, Conte, and Blankenhorn (2006) also found extraversion to be significant in attending in-and out-training programs. Extraverted employees, who are curious by nature, have a higher tendency to attend trainings, which then leads them to be more knowledgeable than others (Mount, Barrick, & Stewart, 1998).

Agreeableness. The agreeableness dimension of FFM indicates the degree to which an individual is willing to agree with others in the environment. Antagonism is on the other pole of agreeableness. Agreeableness measures the extent of the sensibility and trust an individual holds for other people. This factor shows the

tendency of being kind, compassionate, reliable, courageous, soft, and warm (Judge & Bono, 2000). The subcategories of agreeableness are reliability, calmness, being even-tempered, devotion, bluntness, modesty, placidness, and peacefulness. On the other pole of agreeable, antagonism has insecurity, abusiveness, aggression, low levels of empathy, and cheating as sub-categories (Nunes & Hutz, 2007).

Individuals who score higher on the agreeableness factor trust the environment, satisfy the needs and want of other people, and show high commitment to the norms of the group of which that the person is a member. Agreeable individuals also are respectful, kind, gentle, open-hearted, and tender towards other people. As Nunes and Hutz (2007) mentioned, kindness can be considered as one of the basic factors in interpersonal relationships. Individuals with a high degree of agreeableness are cooperative, tolerant, good-tempered, considerate, warm, and trustworthy; they cares about intimate and safe relationships and try to avoid conflicts (Costa, McCrae, & Dye, 1991; Digman, 1990; Nunes & Hutz, 2007).

In contrast, individuals who score lower on the agreeableness factor are dominant and directive. These types of individuals are competitive and thrust themselves to the forefront. People low on the agreeableness factor are greedy, stubborn, aggressive, and nurture grudges against people around them. Thus, antagonist individuals have a high conflict-guided relationship with their social environment (Costa et al., 1991). In addition, they are cold, distant, egoistic, controversial, and rigid (Digman, 1990).

Agreeable individuals also tend to make concessions often. These individuals may give up their wants in order to satisfy other people. Antagonists are instead

selfish and hard to get along with, and that is the reason they act as a dominator. Therefore, these types of individuals use a dominating conflict management style, while highly agreeable people use an accommodator conflict management style. Antagonist individuals try to get what they want, regardless of the harm this may cause to the other party (Kaushal & Kwantes, 2006). Ann and Yang (2012), and Antonioni (1998) revealed that highly agreeable individuals do not have a dominating style.

In terms of organizational behaviors, agreeable employees are highly compatible. Therefore, agreeable employees tend to find tasks that require mutual interaction and thus perform higher if this need is met (Graziano & Eisenberg, 1999). Bradley, Baur, Banford, and Postlethwaite (2013) showed that there is a positive correlation between agreeableness and job performance and success. Agreeable employees are more successful while conducting tasks that require team performance, rather than taking jobs that require intense face-to-face interaction with customers.

As Schippers (2014) explained, teamwork is the most significant indicator of the relationship between agreeableness and job performance. The agreeableness factor is found to be the best predictor of team performance among the other Big Five personality traits (Antonioni, 1998; Barrick et al., 2002, Bradley et al., 2013).

Conscientiousness. The conscientiousness factor assesses the degree to which an individual focuses on objectives. Lack of direction is on the other pole of conscientiousness. Individuals who score higher on the conscientiousness factor are able to stay focused and disciplined on specific goals and thus work systematically, persistently, and patiently to reach their target (Bakker, Demerouti, & ten

Brummelhuis, 2012). Conscientious individuals are responsible, self-disciplined, organized, planned, and careful. In comparison, individuals who score lower on the conscientiousness factor are not able to focus on a target, but rather have multiple goals at a time to which they focus intermittently. The focus of these individuals on reaching a specific goal often changes. Individuals who score lower on conscientiousness are disorganized, have low levels of responsibility, and can be easily distracted from their objectives (Costa & McCrae, 1992; Furnham & Cheng, 2014). Subcategories of conscientiousness are being competent, organized, prudent, responsible, achievement-oriented, and being self-disciplined; subcategories of lack of defectiveness are not being competent, being disorganized, irresponsible, lazy, and impulsive.

Bakker et al. (2012), Barrick and Mount (1991), and Furnham and Cheng (2014) showed that conscientiousness is the most desired trait for employees because conscientious individuals are known to be responsible and achievement-oriented. Conscientious employees can work without distraction to finish their assignments in an organized and planned manner (Barrick & Mount, 1991). These individuals do not look for novel ideas that might lengthen the completion process of the assigned task. The approach conscientious employees use is “doing things right” rather than “doing the right things” (Bowling, 2010). As Raja and Johns (2004) explained, employees who possess this trait are reluctant to take risks and to carry out research, because taking risks and conducting trials may cause uncertainty and unexpected delays in the completion of the task.

In contrast, Furnham and Cheng (2014) stated that conscientiousness is both cultivating and limiting. Although conscientious employees try to satisfy their needs of achievement and work determination, their ethical rigor and over-discreetness may slow down the work process (Barrick & Mount, 1991).

Conscientious employees try to manage conflict in a collaborative style, in which all parties can get what they fully desire. These employees look for alternative ways to resolve conflicts, as they are task-oriented and hard-working individuals (Packer, Fujita, & Herman, 2013). In comparison, subordinates who score lower on conscientiousness used an avoidant style while managing conflicts. There is a negative correlation between conscientiousness and conflict avoidance (Antonioni, 1998). Thus, passing responsibility to other people and disengagement are compatible with the lack of defectiveness dimension (Packer et al., 2013).

Conscientiousness is found to be the highest relevant factor to job performance among the other Big Five personality traits (Brown, Lent, Telander, & Tramayne, 2011; Shaffer & Postlethwaite, 2013). Conscientious employees regard being task-motivated as the best way to accomplish goals. As well as having higher job performance, conscientious employees have higher levels of job satisfaction and lower levels of absenteeism (Bowling, 2010; Lapierre & Hackett, 2007). Although highly conscientious employees may have negative perceptions related to their business life, they work hard to get the job done and stay away from behaviors that may harm the organization. These are the reasons conscientiousness is a highly influential factor in the business environment (Bakker et al., 2012; Furnham & Cheng, 2014).

Neuroticism. Neuroticism shows the tendency to experience negative emotions. Emotional stability is on the other pole of neuroticism. Emotional stability is the extent to which an individual can deal with stress and assesses the degree of being influenced by outside situations. When compared with the other Big Five traits, neuroticism is the only factor that researchers have discussed (Johar, Shah, & Bakar, 2013).

As Costa and McCrae (1995) mentioned, subcategories of neuroticism are anxiety, depression, aggressiveness, unassertiveness, passivity, and inconsiderateness. In comparison, subcategories of emotional stability are sensitivity, comfort, and calmness. Individuals who score higher on emotional stability are calm, positive, optimistic, assertive, and have high levels of self-esteem (Johar et al., 2013). As Barrick and Mount (1991) explained, emotional stability is the measure of the calmness of an individual.

Highly emotionally stable individuals perceive the world around them rationally, and view the situations around them from a more controlled and positive point of view. These types of individuals feel satisfaction from their lives and believe that they are independent (Barrick & Mount, 2000; Hills & Argyle, 2001). Emotionally stable individuals have positive feelings towards other people and complete their tasks in a positive manner (Hills & Argyle, 2001).

Neurotic individuals are inconsiderate, anxious, shy, restless, aggressive, pessimistic, and touchy. Neurotics have the tendency to be affected by and react to external events (Ormel et al., 2013). These types of individuals are unassertive and have low levels of self-esteem. Neurotic individuals tend to have depression and other

psychological disorders more often than emotionally stable individuals (McCrae & Costa, 1991; Ploubidis & Frangou, 2011; Yoon, Maltby, & Joormann, 2013).

Neurotics approach events with doubt and fear. Due to their desperate nature, they lack the drive and energy to complete any task. Because they lack self-confidence, they stay clear of the tasks that they believe they will not be able to complete. They are not willing to take risks, socially or personally (Yoon et al., 2013).

Individuals who score high on neuroticism evaluate events from a negative point of view. These types of individuals have difficulty in maintaining and continuing interpersonal relationships (Ormel et al., 2013). As Costa and McCrae (1992) mentioned, in the center of neuroticism lie fear, feelings of guilt, sadness, and aggressiveness. Also, there is a positive relationship between emotional stress levels and self-esteem and self-efficacy (Auerbach, Abela, Ho, McWhinnie, & Czajkowska, 2010; Johar et al., 2013). Neurotics often deal with complicated feelings and thus use inappropriate defense mechanisms, such as hostility and anxiety (Hyphantis, Goulia, & Carvalho, 2013).

Emotionally stable employees enjoy working in the service industry because they are calm, less stressed, and optimistic (Halim et al., 2011). These traits help to build a close and firm bond based on trust between themselves and their customers. According to Halim et al. (2011), there is a strong correlation between emotional stability and service performance.

In contrast, neurotic employees tend to show high levels of absenteeism, but low levels of intention to quit the job (Raja & Johns, 2004). This finding suggests that neurotic employees have difficulties in pursuing a specific performance level due to

experiencing negative feelings, and because they lack self-esteem and have low levels of achievement drive, they are reluctant to look for a new job (Raja & Johns, 2004).

Employees who score high on the neuroticism factor also have low job satisfaction levels (Padmam, 1995; Sterns, Alexander, Barrett, & Dambrot, 1983; Zhai, Willis, O'Shea, Zhai, & Yang, 2013). This situation might be the result of neurotic employees' negative perception of work-related processes and events, whether it reflects the truth or not. In this sense, it can be assumed that an employee who scores higher on the neuroticism factor would experience long-term job dissatisfaction, compared to an employee who scored lower, due to the belief that high performance or work success will not be rewarded (Zhai et al., 2013).

Openness. Openness to new experiences shows the degree of openness of an individual to intellectual and cultural areas. Closeness to experience is on the other pole of openness. Openness is about the scope of an individual's interests and the degree to which that individual is influenced by new experiences. This trait factor is associated with adjectives such as "analytical," "complex," "independent," "creative courageous," "artistic," and "open-minded," "liberal," and "original" (Ferguson & Patterson, 1998). Sub-categories of openness to new experiences are curiosity, being imaginative, caring about artistic values, excitedness, being interested in many different areas, and not being traditional; sub-categories of closedness to new experiences are conservatism, not being interested in various fields, being unimaginative, being uncurious, and not caring about artistic values (Costa & McCrae, 1995).

Openness to new experiences factor is the contradictory one among the other Big Five personality traits. While Norman (1963) named this trait as “culture,” Goldberg (1992) named it as “intellect,” and finally Costa & McCrae (1995) named it as “openness to experiences”. Trapnel and Wiggins (1990) asserted that the openness to new experiences dimension has a wider context than the other four factors (agreeableness, neuroticism, conscientiousness and extraversion), and that it has a weaker structure.

Individuals who score high on the openness factor have a rich world of fantasy and ideas. These individuals are open to change and new experiences. Additionally, they are creative, have high levels of intuition, are perceptive, curious, sensitive, talented, careful, respectful, thoughtful, and rigorous (Ferguson & Patterson, 1998).

In contrast, individuals who score lower on the openness factor are inclined to be interested in more abstract and practical dimensions of events, show resistance towards change, and try not to deviate from conventional methods. Individuals close to new experiences feel comfortable with traditions, as well as being conservative and doubtful (Costa & McCrae, 1995). These types of individuals do not like change and wish to continue their life as it is, because doing so mitigates uncertainty.

Individuals who are open to new experiences are sensitive to beauty, have an interest in art, and are insightful. According to Feist (1998), scientists and creative artists have higher levels of the openness personality trait. These individuals are aware of their emotions and can easily embrace their feelings (Costa & McCrae, 1995).

The individuals who score high on openness evaluate themselves as independent and *sui generis*, whereas individuals who score lower on openness prefer commonality to variety. They are conservative in nature and employ plain logic. These individuals follow the rules in interpersonal relationships and often obey authority (Ferguson & Patterson, 1998).

Openness is the single factor among the other Big Five personality traits that has a significant relationship with intellect. As previously mentioned, this factor is sometimes used interchangeably with the adjective “intellectual” (DeYoung, Peterson, & Higgins, 2005; DeYoung, Quilty, Peterson, & Gray, 2014; Nusbaum, & Silvia, 2011). Openness to new experiences combines creativity, curiosity, cultural taste, achievement orientation, and desire to be knowledgeable. In other words, this trait involves cultural and mental curiosity terms. At this point, ‘culture’ means valuing art and science, and being sensitive to social values by using a liberal point of view. ‘Intellect’ is defined as learning and analyzing causation (DeYoung et al., 2014). These individuals are emotional, reactive, and rational at the same time. They have flexible behaviors and attitudes (Nusbaum & Silvia, 2011).

In terms of business life, employees who score higher on the openness factor are found to have high job satisfaction (De Jong, van der Velde, & Jansen, 2001; Zhai et al., 2013). These types of employees also have positive feelings towards learning. One can assume that such employees would work efficiently in the research and development department of the organization. Moreover, openness can be regarded as a significant factor for innovators (Cassiman & Valentini, 2009).

Big Five Personality Congruences Between Subordinates and Supervisors

Business environments require much interaction between the supervisors and subordinates. There are various factors, one of which is the personality congruence between supervisor and subordinate, that influence the quality of that dyadic relationship (Bernerth et al., 2007, 2008). There are few studies about the personality congruence of supervisors and subordinates. The studies reveal that personality congruence of supervisors and subordinates help to create a bond because people like to work with others who are similar to them in terms of personality traits (Bernerth et al., 2007, 2008). This would make the interactions between the two parties easier because people enjoy communicating with others who are similar to them, and thus understand their point of view, ideas, and feelings (Antonioni & Park, 2001). According to Turban and Jones (1988), personality congruence would increase work efficiency by reducing role conflict.

Another theory that should be taken into consideration at this point is the Attraction-Selection-Attrition (ASA) model (Schneider, 1987). According to ASA model, personality similarity is found to influence the recruitment process (personality similarity between the candidate and the interviewer) and intentions to leave the organization (personality similarity between the supervisor and subordinate) (Schneider, 1987; Schneider, Goldstein, & Smith, 1995). According to the model, there is constant interaction between the subordinates, the supervisors, and the organization. This interaction starts with the hiring process, at which the candidates learn about the organizational culture, mission, vision, and core values of the organization, and where the supervisors or Human Resource (HR) practitioners start

to interact with the applicant. According to Chen, Lee, and Yeh (2008), the supervisors or HR practitioners hire the candidates similar to them in personality. Additionally, if some dissimilarity between the subordinate and the supervisor occurs along the way, then the subordinate prefers to leave the organization (Schneider, 2001). This model suggests that subordinates with specific personality traits can only survive within the organization because of this three-step process. Schneider et al. (1995) claimed that personality similarity influences the occupational choice, profession, and the intention to stay within the organization.

In an organization, while some employees like and feel close to a supervisor, other employees might not feel the same way about the same supervisor. Thus, subordinates who feel close to the supervisor would perform more efficiently and have high degrees of affective commitment (Strauss, Barrick, & Connerley, 2001). The reason can be explained by the similarity-attraction paradigm (Byrne, 1971). According to Byrne (1971), individuals tend to like and feel closer to the ones they think have the same traits. The underlying mechanism in the similarity-attraction paradigm is reinforcement. Individuals assume that the traits they possess are acceptable socially and feel better by comparing themselves to similar people.

Tajfel and Turner (1986) defined social categorization as creating two categories: the “in-group,” to which the individual belongs, and the “out-group.” In this context, an employee can perform social categorization with the “in-group” if there is congruence among personal values, group values, and organization values, as well as personality traits with group member’s traits. By this way, employees are able to define their personal identity with a similar party (group, organization, supervisor).

Based on the similarity-attraction paradigm (Byrne, 1971), it can be predicted that an extraverted employee would be happier to work with an extraverted subordinate because similarity attracts each other. From this point, it can be assumed that having such a strong bond with the supervisor, a subordinate would feel more effectively committed to a supervisor he/she sees as representing the organization (Felfe & Schyns, 2010; Schaubroeck & Lam, 2002).

As Allinson, Armstrong, and Hayes (2001) mentioned, there are not many studies about personality congruence between supervisor and subordinate and its consequences on work outcomes. According to Felfe and Schyns (2010), personality congruence of supervisors and subordinates is an important factor because people who are similar in their characteristics are more likely to develop trust more easily than the ones who are dissimilar. In addition, similar personality traits would help the supervisor and a subordinate to be able to work fluently because they would share the same dispositions. For example, if both the supervisor and subordinate are high on conscientiousness, they would share the same type of responsibility towards the job they are performing, the projects they are assigned to, or the deadlines they meet. In other words, as the degree of personality congruence between the supervisor and the subordinate increases, the harmony of interaction between them also increases (Engle & Lord, 1997).

The congruence between the personality traits of the subordinates and supervisors would decrease the level of destructive and unwanted work behaviors. In turn, this would increase the level of satisfaction and commitment to the organization (Werbel & Johnson, 2001). One can also assume that if there is no congruence

between supervisor and subordinate personalities, it would harm the communication process of both parties, and because organizational (leader) support would diminish, this might result in negative affective state for the subordinate (Amodio & Showers, 2005).

Organizational Commitment

Research in the area of organizational commitment has grown considerably in recent decades. These studies reveal that organizational commitment has a direct relationship with workforce motivation, absence, turnover, work performance, organizational citizenship behavior, and job satisfaction (Matzler et al., 2011; Panaccio, Vandenberghe, & Ayed, 2014; Patrick, & Sonia, 2012; Poon, 2013; Taylor, Bedeian, & Kluemper, 2012). Becker (1960) was the first to analyze “commitment” in terms of organizational context, and concluded that this concept should be regarded as “consciously taking sides.” In this sense, topics such as commitment to the job, commitment to the group, and commitment to the organization became prominent. However, organizational commitment was the factor that gained significant importance in terms of efficiency and productivity within an organization. Although it is hard to find a common definition in the literature about organizational commitment, it can be described as the psychological unison of the worker with the organization by adapting to the mission, vision, and core values of the organization. Thus, it is the desire to stay with the organization (Allen & Meyer, 1990; Morrow, 2011; Riketta, 2002; Rose, Kumar, & Pak, 2011).

Some have conceptualized and measured organizational commitment in various ways. While analyzing organizational commitment, Allen and Meyer (1990)

Morrow (2011), Riketta (2002), and Rose et al. (2011) used either attitudinal or behavioral point of views. In the attitudinal point of view, commitment is considered mostly as emotional commitment to the organization. Employees committed to the organization in an emotional way are united with the organization, enjoy participating, and feel content to be the part of the organization. Mowday, Steers, and Porter (1979) defined organizational commitment as the employees' unification with the company by accepting the mission and values of the organization, striving for the well-being of the organization, and being willing to continue to be a part of the organization. Attitudinal commitment lays its foundation on the congruence between organization's mission, vision, and core values with the employee's values. From the behavioral point of view, commitment is identified with the decision of the employee about whether to stay with the organization or not. In this context, organizational commitment is the willingness to stay within the company despite the alternatives (Aydoğdu & Aşıkil, 2011; DeConinck & Bachmann, 2011).

Although there are similarities between behavioral and attitudinal points of view related with organizational commitment, there are some differences, too. These variations are about the conditions that lead to the development of commitment and the behaviors that are expected as an outcome of the commitment (Allen & Meyer, 1990; Ruokolainen, 2011). In the literature, attitudinal research is mainly about the identification of the conditions that lead to organizational commitment and the outcomes of the behavioral attitudes. Behavioral research mostly focuses on the factors related with the initial formation of the behavior and the impact it has upon the reiteration of the attitude change.

As previously indicated, confusion regarding the conceptualization of organizational commitment is also reflected in the measurement of the concept. Some have assumed that because organizational commitment is based on various psychological factors, it should be measured in multiple dimensions. Allen and Meyer (1990) came up with the most common categorization of multiple dimensioned organizational commitments.

Allen and Meyer's (1990) Organizational Commitment Model

Allen and Meyer (1990) believed that organizational commitment is a structure that has three different dimensions: affective commitment, continuance commitment, and normative commitment. Affective commitment describes the extent to which employees identify themselves with the organization itself, as well as the responsiveness to the mission, vision, and core values of the organization (Meyer & Allen, 1991). An employee who has affective commitment to the organization has positive feelings towards the organization and feels pride and pleasure in being a part of that company (Rhoades, Eisenberger, & Armeli, 2001). Employees would be willing to continue working for the organization if they have developed a strong sense of affective commitment. Meyer and Allen (1991) found the factors that affect the affective commitment of an employee. One of the factors is a task being presented as a challenge. The task should be exciting and should pose a challenge. Another factor is the transparency of the job, meaning everything about the job should be clear and understandable for the employee. In addition, the employee should be informed about the underlying factors related to the target of the organization (Hackett, Bycio, & Hausdorf, 1994).

Another factor is how the management of an organization takes new ideas and solutions from the employees, indicating whether they are open to new ideas or not. In addition, as the communication level between the employees is higher, the level of affective commitment to the organization increases. Another factor is the feeling of equity between the employees. Here, the management is responsible for creating a sense of equality. In addition, all employees should have the feeling that they are important and essential for the organization in order to reach its goal. Another factor that has an impact on affective commitment is getting regular feedback about performance from the management. Finally, employees who are made a part of the decision-making process, especially regarding job distribution and performance standards, feel more affectively committed to their organizations.

Continuance commitment is about the consequences the employee would face in the case of leaving the job and organization (Shore & Wayne, 1993). Employees who have a strong feeling of continuance commitment would continue to work for the organization only because of their needs. There are some factors that influence the continuance commitment of an employee. For example, the degree to which the abilities, knowledge, and skills are transferrable to other organizations, or whether they will be useful for other organizations or not is one of the main factors that affect continuance commitment (McGee & Ford, 1987). Another factor is logistics. If employees have to leave the place they currently live in order to accept a new job, this will affect their continuance commitment. In addition, if the employee has spent a considerable amount of time and effort for the organization, it can be considered as an individual investment, and the employee might not want to waste it. Moreover, the

employee feels continuance commitment if there is a chance of losing retirement bonuses. Finally, the employee having difficulty in finding a better job may have higher degrees of continuance commitment (Meyer & Allen, 1997).

The third component of organizational commitment is normative commitment (Meyer & Allen, 1991). Normative commitment is the feeling of obligation an employee has about staying in the organization. This feeling of obligation is based on the ethical values and personal beliefs the employee has. The employee believes that the company deserves the employee and his or her commitment. The individual feels and accepts that he or she has responsibilities towards the organization, and, therefore, has to stay in the organization (Solinger, van Olffen, & Roe, 2008). Unlike continuance commitment, the reason for staying within the company is not based on the interests related with the organization. The social environment of employees, consisting of family, close friends, the society they live in, and the organization they work for, constantly reminds employees that fidelity is a virtue. These types of employees often talk positively about others who have worked in a single company that it is the correct and ethical decision to stay in the organization (Cohen, Nahum-Shani, & Doveh, 2010; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Sulsky, 1999). The employee who feels normative commitment to the organization believes that it is the most appropriate approach. At the same time, normative commitment accelerates due to the investments made to the employee by the organization and is marked by the psychological agreement between the employee and the organization. Unlike formal agreements, psychological agreements are biased and can be interpreted differently by both parties (Meyer & Allen, 1991).

Affective Commitment

According to Allen and Meyer's (1990) three-dimensional model of organizational commitment, the basic model relies on the assumption that each dimension of affective, continuance, and normative commitment develops through different experiences, and each of them have a different effect on the work outcomes. All three of the dimensions are negatively correlated with intentions to quit (Berry, 2010; Lee, Lee, & Lum, 2008; Peters, Bhagat, & O'Connor, 1981). This indicates that the dimensions of organizational commitment are negatively related to the turnover of employees. This strengthens the need to increase the affective commitment of employees. Other work outcomes such as performance, organizational citizenship behavior, turnover, and absenteeism may show a different relationship with continuance, affective, and normative commitment to the organization (Blau & Boal, 1987; Chiu & Francesco, 2003; Somers, 1995; Yang, 2012). Work outcomes, such as absenteeism, organizational citizenship behavior, turnover, and job performance are positively related with affective commitment, normative commitment, and continuance commitment. However, there is also literature that suggests a negative correlation between continuance commitment and the aforementioned work outcomes (Barksdale, Bellenger, & Brashear, 2003; Chen, 1998; Yang, 2012). For instance, Yang (2012) found that stronger continuance commitment relates to lower job performance.

There are three aspects of affective commitment based on the employee's unification with the organization (Herrbach, 2006; Mohamed, Taylor, & Hassan, 2006; Porter, Steers, Mowday, & Boulian, 1974; Rhoades et al., 2001). The first one

is confidence and faith in the mission and values of the organization. The second aspect is volunteering to perform harder for the benefiting organization, and the final aspect is the existence of a strong willingness to continue being a part of the organization.

Affective commitment is more than just employees passively carrying out demands of the organization. Instead, it is about an active bond that includes the compliance of self-sacrifice of the employees regarding the well-being of the organization (Herrbach, 2006). Employee's affective commitment is an indication of their unification with the organization, holding on to the organizational rituals, accepting the mission and values of the organization, and showing extra effort for the benefit of the organization (Allen & Meyer, 1990; Shore, Barksdale & Shore, 1995).

According to Allen and Meyer (1990), difficulty of the job, role ambiguity, objective ambiguity, openness to new ideas, trust to the organization, organizational justice, significance of the individual for the company, and feedback are the factors that affect the level, strength, and direction of affective commitment. In this context, affective commitment is positively correlated with performance, organizational harmony, efficiency, quality, organizational citizenship behavior (OCB) and job satisfaction, but negatively correlated with job rotation, absenteeism and intention to quit the job.

When one analyzes the factors that influence affective commitment and their outcome, it becomes apparent that most of them are attitudinal in their nature. In other words, considering that attitudes are the antecedents of behaviors, this would show that affective commitment is supposed to be formed as a consequence of the

attitudinal factors. Although there are different assumptions about the factors that affect the formation and continuance of affective commitment, these factors are considered in the context of individual features and the working environment (Mohamed et al., 2006). Steers (1977) and Chiu and Francesco (2003) stated that personality traits, especially the motive for being successful, determine the level of affective commitment to the organization. Contrarily, Mathieu and Zajac (1990) claimed that colleagues, job features, and the perception of the employee about the treatment received from the organizations are the factors that may influence the attitudes that help the formation of affective commitment.

According to Hartmann and Bambacas (2000), affective commitment is based on the feelings about belongingness and dedication to the organization, and that this type of commitment lays out the relationship between personality traits, organizational structure, and job related experiences by focusing on pay, promotion, role ambiguity, and required skills. In addition, DeCotiis and Summers (1987) stated that organizational climate and affective commitment are positively correlated. Among the indicators of affective commitment, job experience is found to be a factor that most satisfies the psychological needs of the employee, and thus helps to acquire the necessary skills to perform the job and to feel satisfied in the organization (Nabizadeh, Gharib, Dorbanai, & Yaghoobi, 2012). Figure 2 shows the factors that influence affective commitment and their influence on several work outcomes.

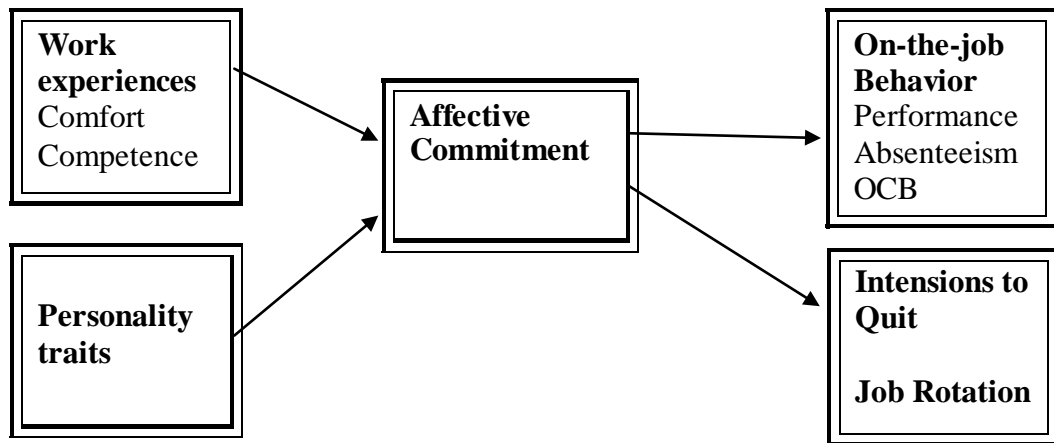


Figure 2. Antecedents and consequences of affective commitment (Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1-18)

Interaction Between LMX Perceptions of Subordinates and Affective Commitment

The interaction between LMX perceptions of subordinates and affective commitment has received attention within the context of LMX theory. There is a positive correlation between LMX perception of subordinates and organizational commitment of the subordinates (Ahmed et al., 2013; Nystrom, 1990; Sherony & Green, 2002). However, there are not many studies about LMX and the three-dimensional model of Allen and Meyer (1990) (Ahmed et al., 2013). Schriesheim and Gardiner (1992) carried out one of the earliest studies about the interaction of LMX perceptions of subordinates and affective commitment. Like the other researchers on the same topic, Schriesheim and Gardiner (1992) proposed a positive correlation

between LMX perceptions of subordinates and affective commitment (Manogram & Conlon, 1993; Meyer et al., 2002; Schyns, Paul, Mohr, & Blank, 2005).

One can assume that subordinates who score high on LMX perceptions would hold fewer intentions to quit the job, and would thus be willing to stay with the organization. In other words, a high quality leader-member exchange relationship would increase affective commitment of the subordinates (Bauer, Erdoğan, Liden, Wayne, 2006). Piccolo et al. (2008) concluded that higher levels of quality LMX relationship exist between subordinate and supervisors lead to higher affective commitment, as well as organizational justice and job satisfaction.

Because LMX theory is based on the norm of reciprocity (Adams, 1965) and social exchange theory (Blau, 1964), subordinates would mutually respond to any positive treatment they received from their supervisors. As previously mentioned, Allen & Meyer's (1990) affective commitment definition points out that employees who are affectively committed to the organization would like to stay with the company because they feel that they are a part of the company. These employees want to give back to the organization as much as they receive. Therefore, as Gerstner and Day (1997) pointed out, LMX is positively related with organizational outcomes, such as organizational commitment.

Subordinates who have high quality LMX relations feel that their supervisors are supporting them, get frequent feedback, and that they are part of a group in the workplace. This would in turn positively influence their perceptions about the organization, and thus they would feel affectively committed to the organization. Also, if subordinates do not want to lose the interactions they value with their

supervisors and their colleagues, this would help to form a psychological attachment to the organization (Bauer et al., 2006).

Influence of Personality Congruence of Subordinates and Supervisors on Subordinates' LMX Perceptions

Dienesch and Liden (1986) were among the first to propose the influence of personality congruence of supervisors and subordinates on LMX perception of subordinates. However, further investigations should be carried out in order to fully comprehend whether specific personality congruence traits affect the perception of leader-member exchange dyadic relationships. Thus, in the following section, I will evaluate the influence of the Big Five personality trait congruence of supervisors and subordinates on LMX perceptions of the subordinates.

Conscientious subordinates can be referred to as having high degrees of responsibility both towards the jobs they perform, and towards their organization. As leader-member exchange is a social exchange in its nature, one can assume that there is a positive link between the similarity in conscientiousness level of the subordinates and supervisors and subordinates' perceptions of LMX (Bernerth et al., 2007).

Because conscientious subordinates have higher levels of job performance and are task-oriented (Brown et al., 2011; Shaffer & Postlethwaite, 2013), supervisors would hold positive feelings towards these types of employees and thus act accordingly.

Because supervisors are known to control the resources that the subordinate needs, there is no doubt that supervisors will use these resources in the favor of conscientious subordinates. This would then lead to positive LMX perceptions of subordinates.

If there is congruence between the level of conscientiousness of subordinates and supervisors, subordinates will be sure their efforts are fully understood and appreciated by their conscientious supervisor. Because LMX theory is based on social exchange dyadic relationship, this would also influence positive LMX perceptions of the subordinate. However, if there is incongruence between conscientiousness of supervisors and subordinates, then the supervisor might not truly care about the high responsibility the subordinates feel towards the task being performed. As a result, the supervisor may not act according to the needs and wants of subordinate. This would create disappointment and low satisfaction, and may harm the LMX perception of the subordinate. As Barrick and Mount (1991) noted, conscientious employees are known to be organized, rigorous, and discreet. Therefore, if a conscientious subordinate is working with a supervisor who is low on conscientiousness (disorganized, indiscreet, and imprecise), it would discourage the subordinate, and negatively influence the LMX perceptions of the subordinate.

Extraversion is also highly related with social exchange. As mentioned previously, extraverted individuals are social, outgoing, and enjoy mutual relationships and interactions with their social environment (Costa & McCrae, 1985). Unlike extravert individuals, introverts like to spend time alone rather than engaging in social relationships. In addition, they prefer to work on their own, and even be helpless at times, and can easily surrender to people who are more dominant in their nature (Mann, 1959). However, social exchange theory posits that both parties involved in the interaction should contribute the same type and amount of exchange to the relationship, and if not, the party who puts forth less effort would face the

negative result. When this theory is restated in terms of leader-member exchange relationship, the incongruence in extraversion might end up with the dominance of the stronger party and submissiveness of the weaker party. These negative results include supervisors limiting the company resources, withdrawal of organizational support, and even preventing the other party from promoting or earning extra rewards and benefits. Consequently, the subordinate might be reluctant to spare effort and show low-performance levels.

In a previous study, Phillips and Bedeian (1994) investigated the role of extravert personality congruence of supervisors and subordinates on LMX perception of subordinates. Employees who scored high on extraversion are engaged in social interaction with their colleagues and supervisors more often than introverts. In addition, extraverted subordinates, in the pursuit of novel and challenging experiences, may be more willing to take risks, and thus accept and conduct projects or assignments that others may find difficult. The achievements gained from such kinds of work projects increase the credibility and popularity of extravert subordinates in the eyes of their supervisor. This situation leads to positive LMX perception of subordinates (Phillips & Bedeian, 1994).

There are no studies in the literature to date about the influence of supervisors who have the extravert personality trait on the LMX perception of subordinates. However, some inferences can be made based on leadership theories and social exchange theory. In their study, Judge, Bono, Ilies, and Gerhardt (2002) concluded that among the other Big Five personality traits, extraversion, together with conscientiousness, was the most significant factor related to leader effectiveness.

Extraverted supervisors form better social relationship with their subordinates. Their interactions with their subordinates are based mostly on trust and understanding, which is a significant factor for leader-member exchange relationship. Thus, supervisor extraversion would influence LMX perceptions of subordinates in a positive way (Bernerth et al., 2007, 2008).

Agreeable individuals are likely to form a positive interaction with others, due to their nature. Agreeable individuals respect other people's rights, value the needs and wants of others, and are cooperative (Costa & McCrae, 1992). All of these traits are highly associated with leader-member exchange relations. Employees who score high on agreeableness would be more likely to create positive emotions in the workplace due to their calm, soft, caring, and collaborative dispositional traits. Agreeable employees, without complaining, would do what their supervisors have asked them to do, help their colleagues in their tasks, and are often willing to take extra assignments to help their supervisors. This, in return, would lead to the sympathy of the supervisor towards agreeable subordinates. Thus, a positive effect occurs in the leader-member exchange relationships. Supervisors tend to ask agreeable subordinates to take more responsibility, being sure that this type of request will be accepted willingly. Therefore, a positive bond between supervisors and subordinates is created. However, if an employee has low levels of agreeableness, this would frustrate the supervisor.

If a supervisor has high scores of agreeableness, this also influences positive interaction with the subordinates. Agreeable supervisors tend to create an encouraging communication atmosphere with their subordinates, which then leads to earning

positive reactions from the subordinates (Mayer, Nishii, Schneider, & Goldstein, 2007). In terms of leader-member exchange relationships, such open and trust-based interactions are a *sine qua non*. Therefore, the subordinate wishes to do as much as possible for the organization and the supervisor in order to pay back all the warmth and kindness received from a supervisor. Thus, a dyadic relationship occurs between the supervisor and subordinate (Mayer et al., 2007).

The openness trait is mostly related to intellectual curiosity, as well as to flexibility, adapting to new situations, and challenge. Thus, an employee who scores high on openness would be willing to experience novel situations. This would be most likely to occur in times of organizational change. Their desire to be a part of the new structure would no doubt receive admiration from their supervisors. Especially if there is congruence in openness trait of both subordinate and the supervisor, this positive feeling would no doubt be mutual.

However, if a subordinate scored low on openness, that employee would resist any change that might be occurring in the work environment. If there is no congruence between openness traits of the supervisor and the subordinate, meaning if a supervisor has high levels of openness, whereas the subordinate has low levels, this would frustrate both parties. It is a supervisor's task to motivate and encourage employees, especially during an organizational change. Therefore, if an employee is high on openness, that person would happily experience the new situation in a self-motivated way. That employee would also be willing to take initiative in this process. Supervisors will be happy and content to have such self-motivated, enthusiastic, and open-minded subordinates. Because LMX is a dyadic relationship, the subordinate

would also want to reward those employees and thus a mutual positive relation would be formed.

As Bernerth et al. (2007, 2008) pointed out, one can assume that neuroticism, unlike other four personality traits (extraversion, agreeableness, conscientiousness and openness), has a negative impact on the LMX perception of subordinates.

Neuroticism is associated with low levels of self-respect and value on the part of an individual. In addition, individuals high on neuroticism are known to experience negative emotions for extended periods of time. They have difficulties maintaining and continuing long-term social relationships. They are constantly nervous, anxious and rigid (Moss, Garivaldis, & Toukhsati, 2007). Thus, it is hard to imagine that a supervisor would prefer to work with a neurotic subordinate. The negative attitude performed by the neurotic employees would have an adverse effect on the supervisor.

However, if an employee is low on neuroticism, this would mean that the person is usually calm, has high degrees of self-respect, tends to see the positivity in various situations, and has a high level of life satisfaction (Cost & McCrae, 1992). These types of employees are inclined to engage in social interactions more often. A supervisor who has such type of an employee would be satisfied with the easy-going nature of the subordinate, and in return would hold positive feelings towards that employee (Bernerth et al., 2007, 2008).

In comparison, if a subordinate were working with an extremely neurotic supervisor, this would also influence that employee's attitudes and feelings towards the supervisor. Johar et al. (2013) showed that supervisors who score high on neuroticism are not preferable to work with. The reason is due to their negativity,

anxiousness, and rigidity. Also, neurotic leaders give little to no attention to how their subordinates are feeling, and thus try to avoid any social interaction with their subordinates. Mutual trust and mutual exchange are at the core of social exchange theory, and therefore leader-member exchange relationships. Leaders who show resistance to interact with their subordinates can rarely be a part of the dyadic relationship. Thus one can assume that congruence in neuroticism has an adverse influence on the subordinate's perceptions of LMX.

Interaction Between Personality Congruence of Supervisors and Subordinates on Affective Commitment of Subordinates

One of the significant factors that determine a subordinate's affective commitment is the similarity of the personality traits of supervisor and subordinates (Olver & Mooradian, 2003). In their study, Allinson et al. (2001) concluded that the rarity of the studies related to the personality congruence of supervisors and subordinates creates a huge gap in the literature and thus should be assessed in further studies. Allinson et al. (2001) also stated the importance of supervisor-subordinate personality similarity as an antecedent of organizational outcomes, such as the subordinate's commitment to the organization.

Although more than a decade has passed since Allinson et al.'s (2001) study, there are still few studies about the personality congruence of supervisors and subordinates and its influence on the affective commitment of subordinates. Saltz (2004) investigated the influence of extraversion, conscientious and emotionally stable personality congruence of subordinates and supervisors on the subordinate's commitment. Saltz (2004) concluded that conscientious and agreeable subordinates'

followers who were conscientious and agreeable were more likely to be committed to the organization.

Chapter Summary

In today's fast-changing and rapidly-growing business world, the level of competition between organizations has also increased (Ghosh, 2013; Porter & Rivkin, 2012; Yee & Eze, 2012). Being able to recruit the appropriate employee for the organization has also gained great importance. To define the "right employee for the organization" is a key point for companies. Organizations spend their time and resources on employees in order to create professionals who will have a positive effect on the company itself (Ghosh, 2013). However, if the employee does not form a commitment to the organization, then that person can easily switch organizations. Thus, turnover in an organization has a negative impact on the companies. Vandenberghe, Bentein, and Panaccio (2014) concluded that especially affective commitment to the organization is negatively correlated with intentions to quit the organization. Vandenberghe et al. (2014) suggested that "organizations should thus emphasize the development of a strong commitment to the organization's goals and values...This can be achieved by recruiting and selecting employees who already share the organization's goals and values" (p. 22).

Personality congruence of subordinates and supervisors is a factor that affects the potential organizational commitment of the subordinates (Goldberg, 2005; Piasentin & Chapman, 2007; Sears & Rowe, 2003). There are a few researchers who analyzed the relationship between LMX perceptions, personality congruence of supervisors and subordinates and work outcomes (Oren et al., 2012). As

aforementioned, LMX theory is based on social exchange theory (Graen & Cashman, 1975). LMX theory lays its foundations on reciprocity and equity. According to LMX theory, supervisors hold some role expectations from their subordinates, and thus control the incentives, rewards, and resources that they can offer back if these expectations are met. Just like supervisors, subordinates also hold expectations from their leaders. Subordinates have their notions of how to be professionally and personally treated, and how to be awarded if they meet their role expectations. In this interaction, which is a dyadic exchange, each party brings its own expectations, which are flexible, and may change over time due to this social exchange. Thus, varying leader-member exchange relationships develop with different supervisor-subordinate dyads.

Although few, some researchers, such as Bernerth et al. (2007, 2008), and Sears and Hackett (2011), have analyzed personality congruence as an antecedent of LMX. Although there are few studies about the Big Five personality traits as antecedent of organizational commitment (Erdheim, Wang, & Zickar, 2006; Meyer et al., 2002), there are no studies in the literature to date that analyze personality traits as antecedents of affective commitment from multiple sources, in other words, from both the supervisors' and subordinates' points of view. Hence, the first aim of this study was to fill the gap in the literature by exploring the direct relationship between personality congruence of supervisors and subordinates and affective commitment. The second aim was to fill the gap in the literature by investigating the mediating role of LMX perception of subordinates, between the relationship of the personality congruence of supervisors and subordinates and affective commitment.

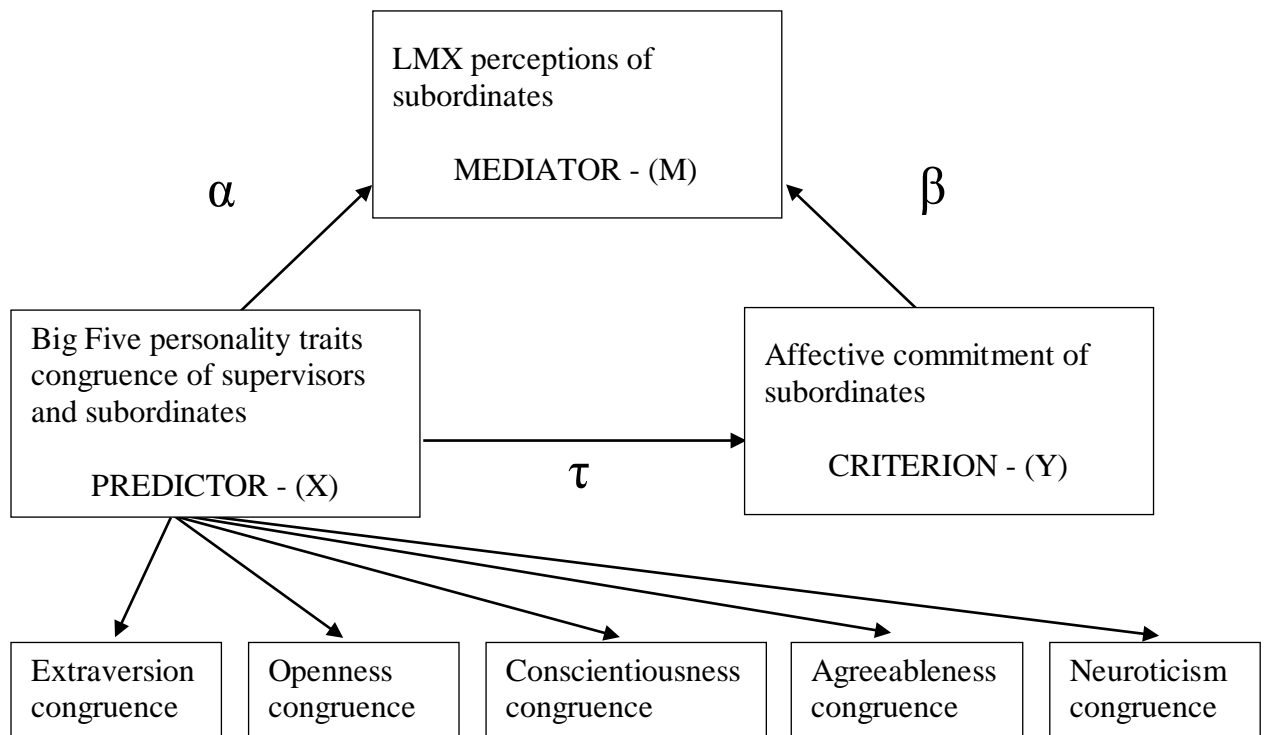


Figure 3. Model of the study.

I used self-reported questionnaires on the Big Five personality traits, LMX perception, and affective commitment as measurement tools. I will further explain the methodology of this study in the following chapter.

Chapter 3: Research Method

Introduction

The purpose of this study was to explore the direct relationship between personality congruence of supervisors and subordinates and affective commitment of subordinates and. In this study, personality congruence of supervisors and subordinates were the independent variables. Affective commitment of the subordinates was the dependent variable.

This chapter contains a detailed discussion of the methods for conducting the proposed research study. I will discuss the research method and design first, followed by the participants and sample size. I will then describe the instrumentation, along with the data collection methods, the validity and reliability of the instruments, the operational definition of the variables, data analysis methods, and ethical assurances. I end the chapter with a summary of the proposed research methodology for this study.

Research Design

I used a quantitative nonexperimental cross-sectional design in this study to examine the direct relationships of personality congruence of supervisors and subordinates and affective commitment of subordinates. I used a SEM to investigate to what extent LMX perceptions of subordinates mediate the relationship between personality congruence of supervisors and subordinates and affective commitment of subordinates. Researchers employ quantitative approaches when the focus of the study is to determine relationships or the impact of a variable on another variable (Babbie, 2012). Quantitative approaches make use of objective measures through numerical representations of the constructs considered in the study. The purpose of

this study was to investigate the relationship between personality congruence of supervisors and subordinates and affective commitment of subordinates, as well as the impact of LMX perceptions of subordinates on the identified relationship. Three survey questionnaires (BFI, LMX-7, and ACS) objectively measured the constructs of personality traits of supervisors and subordinates, LMX perceptions of subordinates, and affective commitment of subordinate participants.

I employed a cross-sectional design in this study because I gathered the data at one point in time (Matthews & Ross, 2010). I collected data through the survey method, and required participants to answer the items once. I used the completed survey questionnaires in the analyses of this study. Moreover, I used a nonexperimental approach because I did not apply interventions or treatment variables in the study (Bryman, 2012). For this study, participants responded to the items in the questionnaire based on their own personalities and natural work environments.

I used a correlational research approach in this study because the purpose was to determine the relationships between identified variables. Correlational research is appropriate to investigate whether an increase in the independent variable also results in an increase or a decrease in the dependent variable. In addition to the correlational approach, I employed SEM to investigate the mediating effect of LMX perceptions of subordinates on the relationship between personality congruence of supervisors and subordinates and affective commitment of subordinates. In investigating the mediating effects of variables, SEM is appropriate because it examines the correlations and covariances between variables in order to identify the extent to which

the mediating variable influences the relationship between the independent and the dependent variables.

Target Population and Sampling Procedure

The target population of this study was adults 18 to 65 years of age, actively employed full-time in the companies that were founded under technopolises or technology science parks in Turkey at the time of data collection. As of 2014, there were a total of 39 technopolises in Turkey. There are 2,508 companies and approximately 19,000 employees working in these technopolises (Uludag Universitesi, 2014).

In this study, I used a probability sampling technique to gather prospective participants. Through the probability sampling technique, employees working full-time in technopolises in Turkey had an equal chance of being selected for the research. I chose a probability sampling technique because this eliminates the bias in selecting respondents for the study. I used the cluster sampling method to gather samples from three technopolises in Ankara. These technopolises were ODTU Technopolis, Bilkent Cyberpark, and Hacettepe Technopolis. There are 200 companies in Bilkent Cyberpark. There are 283 companies on ODTU Technopolis, and 150 companies in Hacettepe Technopolis, bringing the total number of companies to 633. I obtained a list of all prospective participants in the three technopolises from the human resource departments of the companies. However, I only provided participants identified through the probability sampling technique with the email invitation employed in this study. I also obtained company email addresses of

prospective participants sampled through the probability sampling from the human resource departments of the companies.

Sample Size

Fritz and MacKinnon (2007) created a frequency table of sample sizes used in 166 mediational studies reported in the social sciences literature. The authors described several mediation approaches that researchers have, and subsequently classified them as causal steps, indirect effect, SEM, and resampling methods. The results indicated that researchers used the causal steps approach in 70% of the studies, while only 14% used the SEM, despite the advantages noted in this approach (Iacobucci, Saldanha, & Deng, 2007).

According to Fritz and MacKinnon (2007), in 69% of the mediation studies, researchers used sample sizes between 20 and 300. In addition, the median sample size across all of these studies was 187. The median sample size for SEM studies was 240 ($k = 26$) for nested models, and 341 ($k = 26$) for models testing overall fit. The median for studies using the causal steps approach was 160 ($k=134$).

Fritz and MacKinnon (2007) also determined the necessary number of participants/observations for six mediation approaches assuming power = .80, alpha = .05, and several combinations of effect sizes that correspond to Cohen's criteria for small, medium, and large effect sizes. The effect sizes include .14, .39, and .59, respectively. Fritz and MacKinnon (2007) also included a fourth value (.26) that falls approximately halfway between the small and medium effect sizes (.14 and .39). Thus, assuming $\tau' = .39$, $\alpha = .14$, and $\beta = .59$, the sample size is similar across the six approaches, ranging from 385 to 412. Iacobucci et al. (2007) compared the

performance of the basic SEM and causal steps mediation models using one mediator, one independent variable, and one dependent variable. The study included five levels of mediation (0%, 25%, 50%, 75%, and 100%) and five sample sizes (30, 50, 100, 200, and 500). Iacobucci et al. reported that the SEM performed well versus the regression approach throughout the range of sample sizes, although the differences between the two statistical techniques diminish at larger sample sizes.

Fairchild and MacKinnon (2009), LeBreton, Wu, and Bing (2009), and Rucker, Preacher, Tormala, and Petty (2011) indicated that these are reasonable assumed values. The sample size for this study was 400 participants. As Fritz and MacKinnon (2007) indicated, this sample size is consistent with power = .80, alpha = .05, and corresponding model effect sizes of .39, .14, and .59 for τ , α , and β . In addition, Fairchild and MacKinnon (2009), LeBreton et al. (2009) and Rucker et al. (2011) described this sample size as being within the range.

Procedures for Recruitment, Participation, and Data Collection

For this study, I used an online survey to collect the data. An online survey is more efficient in both time and cost, given the proposed number of participants and the significant variety of locations at which their work is based. An online survey is also a more considerate manner of data collection for both the employees and the organizations at which they are employed. It allows the employees to complete the survey at the most convenient point of their workday. First, I contacted General Managers of METU, Hacettepe, and Bilkent Technopolises to ask for permission to get in touch with the companies underneath them. When I get the approval to do so, I contacted Human Resources (HR) departments of the companies and explained the

aim of the study to the HR officials, requesting the participation of their organizations. Specifically, participation would involve access to first-level supervisors and their respective subordinates across industries to complete several surveys. In addition, I elicited their assistance in first notifying the employees by email to inform them of the impending email from me, therein indicating the approval of the organization to do so.

I prepared and uploaded the survey questionnaire to SurveyMonkey. The email invitation also contained an informed consent form to ensure that only participants who agreed to participate in the study would proceed with answering the questionnaire. The participants were asked to click the link to the SurveyMonkey questionnaire. The participants were directed to the informed consent form. Only participants who agreed to participate in the study were directed to continue to the survey questionnaire. As for data collection, I created two sets of questionnaires for this study, one to be completed by the subordinates, and the other to be completed by the supervisors. The subordinate questionnaire consisted of four parts. The first section covered the demographics of the respondent. The respondents provided their gender, age, education level, and occupational tenure. In the second section of the questionnaire, the respondents completed the BFI, and in the third section, they completed the LMX-7. In the fourth and final section, the subordinates completed the ACS. The survey questionnaire took approximately 30 minutes to complete. Participants should have been able to complete the survey in one sitting.

The supervisor completed a questionnaire consisting of two sections. The first was the same as the subordinate questionnaire, wherein the respondents provided

demographic information such as age, gender, education level, and occupational tenure. The second section was the BFI. The completion of the survey questionnaire will take approximately 15 minutes. Supervisors and subordinates received unique emails and participant codes.

The email invitation contained a brief background of the study, as well as the role of the participants in the study. I asked prospective participants who found interest in participating to click the link to SurveyMonkey. The link lead to the informed consent form. The informed consent form contained information on how I kept and maintained the confidentiality and anonymity of participants. To ensure the pairing of supervisors and subordinates, in the email sent to the potential respondents, I wrote a code, together with the universal resource locator (URL) of the document created specifically for this study. The respondents then entered the code sent to them. The numerical ID code identified the participant throughout the study without collecting any identifiable information such as name, address, and/or contact number. I created the codes in such a way that a subordinate respondent would be matched to his/her superior. For example, if the superior's code was A01#148, I gave the matching subordinate the code B01#148. I gave the second matching pair the codes A02#148 (for superior) and B02#148 (for subordinate). I informed participants that they could withdraw from the study at any point in time without consequence. I directed only participants who agreed to participate in the study to the survey questionnaire. I presented the responses in aggregates to ensure that each response remained anonymous. The data in SurveyMonkey could only be accessed by me with the use of a password. Only I could access the individual level data, and kept the

survey data in a separate file and on a separate device. I collected, prepared, and analyzed the data in SPSS v21.0.

Instrumentation

In this study, I used three surveys. Because this study was conducted in Turkey, I used the Turkish version of each survey. The supervisors completed only the BFI. Subordinates completed the BFI, LMX-7, and ACS questionnaires. A copy of the permission to use the questionnaires can be found in Appendix A for the ACS, Appendix B for the LMX-7, and Appendix C for the BFI.

Big Five Inventory

The BFI (John et al., 1991) is a widely-used tool to measure the personality traits of subordinates and supervisors. The BFI consists of 44 items. This inventory has five constructs that define five personality traits, including openness, conscientiousness, extraversion, agreeableness and neuroticism. The BFI uses a 5-point Likert scale ranging from 1 (*Disagree strongly*) to 5 (*Agree strongly*). The BFI has been shown to be both valid and reliable (John, Naumann, & Soto, 2008; Soto, John, Gosling, & Potter, 2008). One of the main reasons for using the BFI is that the scale requires relatively less time than other Big Five personality tests, such as the NEO PI-R (Costa & McCrae, 1991), which has 240 items, and the NEO-FFI (Costa & McCrae, 1992), which has 60 items. In addition, the BFI is easy to understand and practically appropriate to complete. Some sample items include “I am talkative,” and “I am easily distracted.” The BFI used in this study can be found in Appendix F.

Reliability and validity. John and Srivastava (1999) mentioned that, “the alpha reliabilities of the BFI scales typically range from .75 to .90 and average

above .80. The three month test-retest reliabilities range from .80 to .90 with a mean of .85.” (p.115). Schmitt, Allik, McCrae, and Benet-Martinez (2007) carried out research in 56 countries on the patterns and profiles of self-description; they included Turkey in their study. Schmitt et al. (2007) used the BFI and found the Cronbach alpha coefficients for neuroticism, extraversion, openness, conscientiousness, and agreeableness to be .79, .77, .76, .70, and .78, respectively.

Evinç (2004) adapted the BFI to Turkish. Just like the original version, the Turkish adapted version of the BFI includes eight items that test extraversion, nine items that test agreeableness, nine items that test conscientiousness, eight items that test neuroticism, and 10 items that test openness. In that study, Evinç (2004) found the Cronbach alpha coefficient for extraversion, agreeableness, conscientiousness, neuroticism, and openness to be .74, .51, .66, .75, and .74, respectively. In order to adapt the BFI into Turkish, Evinç first asked a psychologist and two graduate students to make the initial translations. After that, the psychologist and two graduate students distributed the translated BFI to five independent individuals (one psychologist, two graduate students from an English teaching department, and one student from a Political Administration department). These five individuals selected the best translation of each item. Next, the researchers designed the agreed upon items in Turkish as the questionnaire and gave it to a psychologist for back translation. Later, they gave the revised questionnaire to two English teaching department students. As a last step, all translators came together for a final consensus, and the final Turkish version of the BFI was created.

Measures, constructs, and scoring of BFI. As previously mentioned, the BFI consists of 44 items that evaluate the Big Five personality traits of an individual. These facets are presented in Table 1. These dimensions are then divided into sub-personality facets. Sixteen of the 44 items in the BFI are reverse scored.

Table 1

Measures and Facets of BFI

Big Five Dimensions	Facet (and correlated trait adjective)
Extraversion vs. introversion	Gregariousness (sociable)
	Assertiveness (forceful)
	Activity (energetic)
	Excitement-seeking (adventurous)
	Positive emotions (enthusiastic)
	Warmth (outgoing)
Agreeableness vs. antagonism	Trust (forgiving)
	Straightforwardness (not demanding)
	Altruism (warm)
	Compliance (not stubborn)
	Modesty (not show-off)
	Tender-mindedness (sympathetic)
Conscientiousness vs. lack of direction	Competence (efficient)
	Order (organized)
	Dutifulness (not careless)
	Achievement striving (thorough)
	Self-discipline (not lazy)
	Deliberation (not impulsive)
Neuroticism vs. emotional stability	Anxiety (tense)
	Angry hostility (irritable)
	Depression (not contented)
	Self-consciousness (shy)
	Impulsiveness (moody)

(continued)

Big Five Dimensions	Facet (and correlated trait adjective)
	Vulnerability (not self-confident)
Openness vs. closedness to experience	Ideas (curious) Fantasy (imaginative) Aesthetics (artistic) Actions (wide interests) Feelings (excitable) Values (unconventional)

Note. Source: John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 102–138). New York: Guilford Press.

Leader-Member Exchange Questionnaire (LMX-7)

Graen and Uhl-Bien (1995) developed the LMX-7 in order to measure the quality of relationship between a supervisor and a subordinate. There are seven items in the scale that are measured on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The questions are about the efficiency of the work-related relationships between the supervisor and subordinate, comprehension of job-related problems and necessities, awareness about self-potential and willingness to support the employees (Uhl-Bien & Maslyn, 2003). Some sample questions include “My manager understands my job-related problems and needs” and “Regardless of the amount of formal authority my manager has, my manager would ‘bail me out’ at his or her expense.” The average of the responses given by participants determines the quality of their relationship with their supervisor. A high average score indicates a high-quality relationship. The LMX-7 questionnaire can be found in Appendix D. For the purpose of this study, assistants translated and back translated the LMX-7 in Turkish based on previous studies carried out by Turkish researchers.

Reliability and validity. The LMX-7 scale is a widely-used tool in many different countries, and has been shown to be both a valid and reliable measure of the quality of the leader-member exchange relationship (Moss, Sanchez, Brumbaugh, & Borkowski, 2009; Schyns et al., 2005; Sue-Chan, Chen, & Lam, 2011; Varma, Pichler, Srinivas, & Albarillo, 2007). Özutku, Ağca, and Cevrioğlu (2008) adapted the LMX-7 to Turkish and concluded that this measurement tool, in line with the original, is a single factor structure with a Cronbach alpha coefficient of .72. In addition, in another study carried out in Turkey, Cerit (2012) used the Kaiser-Meyer-Olki (KMO) test and Bartlett sphericity test for conducting the factor analysis of the LMX-7 scale. Cerit concluded a meaningful factor analysis as indicated by the KMO (.81) and Bartlett Sphericity test ($\chi^2 = 1150.90, p < .001$) result. It is widely used in factor analysis to give an indication whether a factor analysis is appropriate or not for the tested variables. Cerit conducted a factor analysis to investigate the structure of the LMX-7 scale, and found that it consists of a single factor. The factor loadings of the items in the Turkish adaptation of the LMX-7 items ranged from .658 to .913, and the factor variance was 68.31%. In the same study, the mean item total reliability coefficients of the scale ranged from $r = 0.56$ to $r = 0.86$, and the Cronbach alpha was .92.

Measures, constructs, and scoring of LMX-7. The LMX-7 scale (Graen & Uhl-Bien, 1995) measures loyalty, affect, contribution, and professional respect constructs. The results can be interpreted as follows, depending on the score earned: 30-35 (*very high*), 25-29 (*high*), 20-24 (*moderate*), 15-19 (*low*), and 7-14 (*very low*). Scores in the upper ranges indicate stronger, higher-quality leader-member exchanges

(e.g., in-group members), whereas scores in the lower ranges indicate exchanges of lesser quality (e.g., out-group members) (Graen & Uhl-Bien, 1995).

Affective Commitment Scale

Allen and Meyer (1990) developed the Organizational Commitment Scale (OCS) based on three types of organizational commitment: normative, affective, and continuance. In OCS, each sub-dimension of normative, continuance, and affective commitment has six items, for a total of 18 items. I used only the six items related to ACS in this study. The tool is measured by a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Some example items include “I really feel as if this organization's problems are my own” and “I do not feel ‘emotionally attached’ to this organization.” A copy of the permission letter allowing the use of ACS can be found in Appendix A. The ACS questionnaire used in this study can be found in Appendix E. For the purpose of this study, assistants translated and back translated the ACS in Turkish based on previous studies carried out by Turkish researchers.

Reliability and validity. Çetin, (2006), Çöp (2008), Polat and Uğurlu (2009), Sarıdede and Doyuran (2004), Simşek and Aslan (2007), and Wasti (2000, 2002) used Allen and Meyer’s (1990) 6-item ACS in Turkey. Wasti (2000; 2002) carried out the reliability and validity analysis of Allen and Meyer’s (1990) six-item ACS, which, when translated into Turkish, was shown to be acceptable. In another study, Kurşunoglu, Bakay, and Tanrıöğen (2010) found the Cronbach alpha of the affective commitment dimension of the ACS to be 0.79. This indicates that the ACS is a reliable tool for measuring affective commitment. The validity of the questionnaire was determined to be acceptable with a factor loading of .85.

Data Analysis

For the first hypothesis of this study (H_{1A}-H_{1E}), I tested a direct relationship between the personality congruence of supervisors and subordinates and affective commitment of the subordinates. In the second hypothesis of this study (H_{2A}-H_{2E}), I analyzed the mediating effect of LMX perceptions of subordinates on the relationship between the personality congruence of supervisors and subordinates and the affective commitment of subordinates, an indirect effect. If there was a missing pair in the supervisor-subordinate dyads, I excluded the data. I analyzed the data with the SPSS software program.

There are several techniques used to develop the congruence index. In this study, I analyzed actual congruence. As Bin Ahmad (2008) indicated, perceived congruence can be different than actual congruence. For example, a subordinate might perceive congruence with his or her supervisor in terms of agreeableness; however, in reality, the actual congruence level of their agreeableness may not show the same result.

Edwards (1993, 1994) proposed a model of polynomial regression analysis, which aims at discarding the disadvantages of obtaining differences in the response scores of supervisors and subordinates while testing congruence. In recent years, researchers from the fields of social and behavioral sciences have widely used Edwards's (1993, 1994) polynomial regression method. Cohen et al. (2010) mentioned that "polynomial regression of a predictor X on a dependent variable Y refers to a regression model which includes higher powers of X, beyond its linear term" (p.830). The polynomial regression method is used to analyze the congruence

between two entities and its relationship with different consequences (Bailey & Fletcher, 2002; Jansen & Kristof-Brown, 2005; Myers, 2004). Polynomial regression involves the independent measurement of the two constructs, such as supervisor and subordinate, complemented by higher-order terms that illustrate the relationship (Edwards & Parry, 1993).

Mediation Analysis

I conducted a mediation analysis to examine how the variable LMX perceptions of subordinates affect the relationship of the congruence of personalities of supervisors and subordinates with affective commitment of subordinates. The mediation analysis is appropriate to investigate how a variable affects the relationship between identified independent and dependent variables. A structural equation modeling (SEM) approach using SPSS AMOS aided me in analyzing the mediating effect of LMX perceptions of subordinates on the relationship of the independent (personality congruence) and dependent (affective commitment) variables.

I conducted the SEM analysis conducted in the following order: base model development, path diagramming, assessing model identification, estimates and model fit evaluation, model interpretation and analysis, and the final model. The base model development involves establishing the relationship between the personality congruence variables and affective commitment. As for path diagramming, I used a main model to test the significance of the different determinants and the corresponding weights of the independent variable to the dependent variables. The focus of SEM is on exploring the mediating effect of variables on the relationships between the independent and the dependent variables (Stapleton, 2008). The SEM

confirmed whether the data used in this study fit as well as in the case of using manifest variables. In addition, I used a part of the main model to test the significance of the different correlations or covariance amongst the constructs based on the hypotheses as well. SPSS AMOS assisted in modeling the mediating variables in this study. SPSS AMOS helps perform statistical analysis, which determined whether the data fit the model utilized in the study (Bagozzi & Yi, 2012). All statistical analyses considered a significance level of .05.

Ethical Procedures

In this study, I used the online survey tool SurveyMonkey to collect data. I invited the participants to take part in the study via the online survey. I uploaded the questionnaires to SurveyMonkey. First, I sent an email invitation letter to participate in the survey, and included a link to the online survey. The link directed the participants to the Informed Consent Form. In the Informed Consent Letter, I first informed the respondents about the context and the benefits of the study. I informed the respondents that each subordinate would be matched with his/her specific supervisor. I notified the respondents that supervisors would complete the BFI, and informed the subordinates that they would complete the BFI, ACS and LMX-7. I informed the supervisors that the questionnaire would take approximately three minutes, and informed the subordinates that the questionnaire would take approximately seven minutes to complete.

The respondents knew that participation in this study was on a voluntary basis and that they were free to drop out of the study at any time. I also informed the respondents that the data would only be accessible to the researcher, and subordinates

or supervisors would have no knowledge of who participated and their responses. They also knew that no physical or psychological harm was expected while completing the survey. I made the participants aware that only I would handle the results of this study and would use it in academic research. I notified the respondents that they would not have a fee be asked of them, and would not receive payment to complete the questionnaires. Finally, the respondents needed to agree to the terms and conditions of the study. This cover letter, which acted as an Informed Consent, required the participant's confirmation to complete the questionnaires.

I will store the data gathered from the questionnaires electronically in a personal computer that is password-protected in order to prevent any exterior access to the data. This will help to maintain the confidentiality. The coding of the subordinates' and supervisors' questionnaires ensures the anonymity of the respondents, because no identifying information was required in the responses. I only used the coding to match the subordinates' responses to those of their supervisors'. I performed data analysis with SPSS on my personal computer, which is password-protected, and only I have access to the computer.

Summary

In this quantitative research, I investigated the mediating role of LMX perceptions of subordinates on the relationship between the Big Five personality traits congruence of supervisors and subordinates and affective commitment of subordinates. I measured the Big Five personality traits with the BFI (John et al., 1991), which is a relatively short tool consisting of 44 items designed to analyze the adjectives related to traits. I measured the LMX relationship with the LMX-7, a tool

developed by Graen and Uhl-Bien (1995) that consists of seven items to analyze the exchange relationship and quality between the subordinate and the supervisor. I measured affective commitment with Allen and Meyer's (1990) ACS, consisting of six items. I contacted each author to get permission to use the scales, and all of them granted their permission. This study has several benefits for the community that helps to create positive social change. First, the aim of this research was to fill the gap in the literature by analyzing the mediating role of LMX on the relationship between the congruence of the Big Five personality traits of supervisors and subordinates and affective commitment of subordinates. I was the first to investigate this topic in Turkey. The results of this study can help supervisors to understand the role of personality congruence of supervisors and subordinates and its relationship to affective commitment of the subordinates, which impacts work outcomes such as satisfaction, absenteeism, turnover, and performance. Also, the mediating role of LMX between these two constructs helps the supervisors to create an effective workplace environment. Gaining insight into whether LMX mediates personality similarity and affective commitment will enable leaders, members, and the organization to make better decisions regarding pairings of supervisors and subordinates. The results of this study will encourage leaders, members, organizations, and societies to be more sensitive to significance of personality similarity.

Chapter 4: Results

Introduction

The aim of this study was to investigate the mediating role of LMX perceptions of subordinates on the relationship between personality congruence of supervisors and subordinates and affective commitment of subordinates. I measured the personality traits, which were the independent variables of this study, using the BFI, which measures openness, conscientiousness, extraversion, agreeableness, and neuroticism. The LMX-7 scale measured LMX, which was the mediating variable of this study. Finally, I measured affective commitment, which was the dependent variable of this study, using Allen and Meyer's ACS.

I conducted this quantitative study in Turkey using a sample of 407 supervisor-subordinate dyads employed at Turkish technopolises. A technopolis is a technology science park which includes facilities designed and managed to develop innovative technology. I employed quantitative SEM to analyze data both from the supervisor and subordinate and investigate affective commitment as a consequence of LMX. I tested the following model (see Figure 4) using SPSS AMOS. I used polynomial regression in order to create congruence measurements between supervisors and employees for each of the five personality traits: Extroversion, openness, conscientiousness, agreeableness, and neuroticism. I then assessed the significance of each of the resulting regression equations.

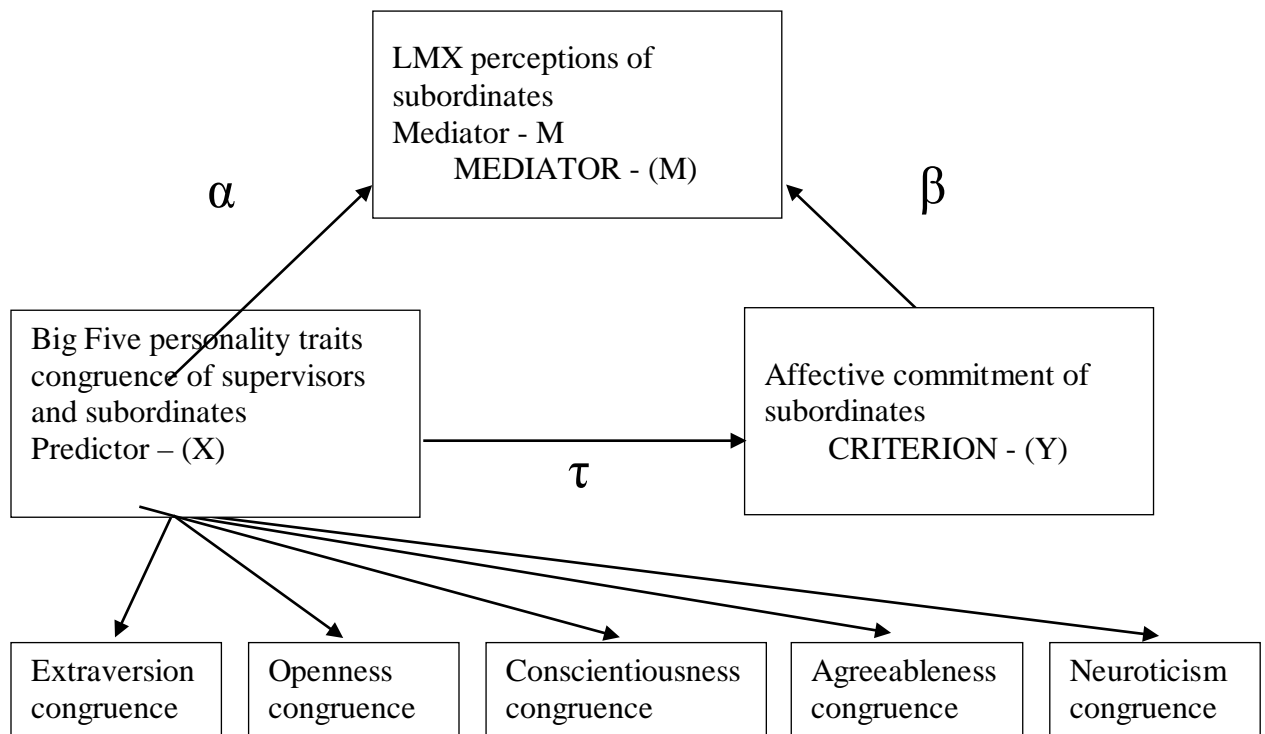


Figure 4. SEM model tested in AMOS.

The first research question of this study was designed to measure the relationship between the congruence of the Big Five personality traits (independent variables) and affective commitment of subordinates (dependent variable). Thus, the hypotheses were organized to show each of the Big Five personality traits as sub-hypotheses. The second research question of this study was designed to measure the mediating affect of LMX perception of subordinates between the congruence of the Big Five personality traits of supervisors and subordinates and affective commitment of subordinates. I analyzed each of the Big Five personality traits as subhypotheses.

RQ1 (Quantitative): Is there a significant relationship between the congruence of the Big Five personality traits and affective commitment of subordinates?

H₁: There is a significant relationship between the congruence of the Big Five personality traits of subordinates and supervisors and affective commitment of subordinates.

H_{1A}: There is a significant relationship between the congruence of the openness personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{1B}: There is a significant relationship between the congruence of the conscientiousness personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{1C}: There is a significant relationship between the congruence of the extraversion personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{1D}: There is a significant relationship between the congruence of the agreeableness personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{1E}: There is a significant relationship between the congruence of the neuroticism personality trait of supervisors and subordinates and affective commitment of subordinates.

RQ2 (Quantitative): Will LMX mediate the relationship between the congruence of the Big Five Personality traits of supervisors and subordinates and affective commitment of subordinates?

H₂: LMX will mediate the relationship between the congruence of the Big Five Personality traits of supervisors and subordinates and affective commitment of subordinates.

H_{2A}: LMX will mediate the relationship between the congruence of the openness personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{2B}: LMX will mediate the relationship between the congruence of the conscientiousness personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{2C}: *LMX* will mediate the relationship between the congruence of the extraversion personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{2D}: LMX will mediate the relationship between the congruence of the agreeableness personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{2E}: LMX will mediate the relationship between the congruence of the neuroticism personality trait of supervisors and subordinates and affective commitment of subordinates.

I will continue Chapter 4 with demographic information as well as descriptive statistics of the study variables. I will follow with bivariate correlations to assess the relationships between the variables as well as tests of assumptions required for the analysis, which included normality testing, outlier detection, and multicollinearity

assessment. I conducted polynomial regression in order to assess congruency between supervisors and subordinates. Finally, I will discuss the results of the SEM.

Data Collection

Participant Demographics

I sampled 407 supervisor-subordinate dyads employed at Turkish technopolises for this study. Tables 2-4 provide frequencies and percentages. There were 196 (48.2%) females and 211 (51.8%) males. One hundred seventy-three (42.5%) were married and 234 (57.5%) were single. 303 (74.4%) were University graduates and 104 (25.6%) were non-graduates. Ages ($M = 31.96$, $SD = 5.47$) ranged from 25 to 49 years.

Table 2

Gender

	Frequency	Percent	Cumulative Percent
Female	196	48.2	48.2
Male	211	51.8	100.0
Total	407	100.0	

Table 3

Marital Status

	Frequency	Percent	Cumulative Percent
Married	173	42.5	42.5
Single	234	57.5	100.0
Total	407	100.0	

Table 4

Education

	Frequency	Percent	Cumulative Percent
Graduate	104	25.6	25.6
University Graduate	303	74.4	100.0
Total	407	100.0	

Descriptive Statistics

I analyzed supervisors' and employers' (subordinates) scores from Big Five personality traits as well as the LMX perceptions of subordinates. I examined scores for the five personality traits: extroversion, openness, conscientiousness, agreeableness and neuroticism as well as scores for affective commitment of employees. Descriptive statistics for these scores are shown below in Table 5. The mean of each variable ranged from 3.01 to 3.61, with standard deviations ranging from 0.35 to 1.15.

Table 5

Descriptive Statistics of Study Variables

Variable	N	Min	Max	Mean	SD
Affective Commitment	407	1.00	4.67	3.03	.35
LMX	407	1.00	5.00	3.61	1.15
Extroversion_Sup	407	2.13	4.50	3.38	.50
Extroversion_Sub	407	2.13	4.38	3.34	.49
Openness_Sup	407	1.90	4.90	3.45	.56
Openness_Sub	407	1.60	4.80	3.39	.54
Conscientiousness_Sup	407	2.11	4.56	3.45	.38
Conscientiousness_Sub	407	2.11	4.44	3.40	.40
Neuroticism_Sup	407	1.63	4.50	3.04	.48
Neuroticism_Sub	407	1.75	4.50	3.01	.48
Agreeableness_Sup	407	1.67	4.56	3.25	.37
Agreeableness_Sub	407	1.67	4.33	3.18	.38

Results

Correlation Analysis. I conducted bivariate correlations to assess the relationship between supervisors' and employees' (subordinates) scores from Big Five personality traits, LMX perceptions of subordinates, and affective commitment. I calculated skewness and kurtosis statistics in order to evaluate normality. There were no significant violations of normality for the continuous variables.

Table 6

Kurtosis and Skewness Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
AffectiveCommitment	407	-.295	.121	7.686	.241
LMX	407	-.602	.121	-.724	.241
Extroversion_Sup	407	-.176	.121	-.395	.241
Extroversion_Sub	407	-.185	.121	-.488	.241
Openness_Sup	407	-.292	.121	-.159	.241
Openness_Sub	407	-.347	.121	-.098	.241
Conscientiousness_Sup	407	.167	.121	.321	.241
Conscientiousness_Sub	407	.163	.121	-.147	.241
Neuroticism_Sup	407	.224	.121	.034	.241
Neuroticism_Sub	407	.415	.121	.193	.241
Agreeableness_Sup	407	.164	.121	.585	.241
Agreeableness_Sub	407	.248	.121	.559	.241
Valid N (listwise)	407				

Pearson bivariate correlations are given in Table 7. There was a significant small correlation between affective commitment and the agreeableness congruency scores ($r = -.104$, $p = .036$). I found no other correlations between affective commitment and the other personality traits to be statistically significant ($p > .05$). There were no statistically significant correlations between LMX and personality

congruency scores ($p > .05$). Additionally, there were no significant correlations between LMX and affective commitment.

Table 7

Pearson Correlations between LMX, Affective Commitment and Congruency

	LMX	Affective Commitment
LMX	1.00	.030
Affective Commitment	.030	1.00
Congruency	.018	-.040
Openness		
Congruency	-.080	.011
Conscientiousness		
Congruency	-.036	.000
Neurotic.		
Congruency	.031	-.104*
Agree		
Congruency	.052	.062
Extroversion		

Note. *Correlation is significant at the 0.05 level (2-tailed).*

Polynomial Multiple Regression Analysis

The next step in the analysis was to use polynomial regression in order to analyze congruency between supervisors and employees for each of the five personality traits: extroversion, openness, conscientiousness, agreeableness and neuroticism. I created five second-order regression models to test for the significance of each of the subordinates and supervisor personality traits with affective commitment. I tested the following model for each of the big five personality traits:

$$\text{Affective Commitment} = B_o + B_1X_{sup} + B_2X_{sub} + B_3X_{sup} * X_{sub} + B_4X_{sup}^2 + B_5X_{sub}^2 + e$$

where X_{sup} and X_{sub} were the personality scores for supervisors and subordinates, respectively, for each of the Big Five personality traits of extroversion, openness, conscientiousness, agreeableness, and neuroticism.

The first model regressed the extroversion scores of both subordinates and supervisors, predicting affective commitment. The first block of the regression included both scores for subordinates and supervisors. Each additional block included the higher-order terms of the interaction and squared terms separately. None of the models were statistically significant, as shown in Table 8. Table 9 reports the significance in change of R squared.

Table 8

<i>ANOVA^a</i>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.314	2	.157	1.270	.282 ^b
	Residual	49.903	404	.124		
	Total	50.217	406			
2	Regression	.512	3	.171	1.384	.247 ^c
	Residual	49.705	403	.123		
	Total	50.217	406			
3	Regression	.520	4	.130	1.052	.380 ^d
	Residual	49.697	402	.124		
	Total	50.217	406			
4	Regression	.696	5	.139	1.127	.345 ^e
	Residual	49.521	401	.123		
	Total	50.217	406			

Note. a. Dependent Variable: AffectiveCommitment

b. Predictors: (Constant), Extroversion_Sub, Extroversion_Sup

c. Predictors: (Constant), Extroversion_Sub, Extroversion_Sup, ExtroSupXExtroSub

d. Predictors: (Constant), Extroversion_Sub, Extroversion_Sup, ExtroSupXExtroSub, ExtroSupSquared ExtroSupSquared, ExtroSubSquared

e. Predictors: (Constant), Extroversion_Sub, Extroversion_Sup, ExtroSupXExtroSub

Table 9

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics F Change	df1	df2	Sig. F Change
1	.079 _a	.006	.001	.35146	.006	1.270	2	404	.282
2	.101 _b	.010	.003	.35119	.004	1.609	1	403	.205
3	.102 _c	.010	.001	.35160	.000	.064	1	402	.800
4	.118 _d	.014	.002	.35142	.004	1.426	1	401	.233

Note. a. Predictors: (Constant), Extroversion_Sub, Extroversion_Sup

b. Predictors: (Constant), Extroversion_Sub, Extroversion_Sup, ExtroSupXExtroSub

c. Predictors: (Constant), Extroversion_Sub, Extroversion_Sup, ExtroSupXExtroSub, ExtroSupSquared

d. Predictors: (Constant), Extroversion_Sub, Extroversion_Sup, ExtroSupXExtroSub, ExtroSupSquared, ExtroSubSquared

The second model regressed openness of both supervisors and subordinates predicting affective commitments. The first block of the regression included both scores for subordinates and supervisors. Each additional block included the higher-order terms of the interaction and squared terms separately. None of the models were statistically significant as shown in table 10. Table 11 reports the significance in change of R squared.

Table 10

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.020	2	.010	.082	.921 ^b
	Residual	50.196	404	.124		
	Total	50.217	406			
2	Regression	.022	3	.007	.060	.981 ^c
	Residual	50.194	403	.125		
	Total	50.217	406			
3	Regression	.126	4	.032	.254	.907 ^d
	Residual	50.091	402	.125		
	Total	50.217	406			
4	Regression	.279	5	.056	.448	.814 ^e
	Residual	49.938	401	.125		
	Total	50.217	406			

Note. a. Dependent Variable: AffectiveCommitment

b. Predictors: (Constant), Openness_Sub, Openness_Sup

c. Predictors: (Constant), Openness_Sub, Openness_Sup, Openness_SupXOpenness_Sub

d. Predictors: (Constant), Openness_Sub, Openness_Sup, Openness_SupXOpenness_Sub, Openness_SupSquared

e. Predictors: (Constant), Oppenes_Sub, Openness_Sup, Openness_SubXOppennes_Sub, Oppennes_SupSquared, Openness_SubSquared

Table 11

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.020 ^a	.000	-.005	.35249	.000	.082	2	404	.921
2	.021 ^b	.000	-.007	.35292	.000	.016	1	403	.899
3	.050 ^c	.003	-.007	.35299	.002	.834	1	402	.362

The third model regressed the conscientiousness scores of both subordinates and supervisors, predicting affective commitment. The first block of the regression included both scores for subordinates and supervisors. Each additional block included the higher order terms of the interaction and squared terms separately. None of the models were statistically significant as shown in table 12. Table 13 reports the significance in change of R squared.

Table 12

<i>ANOVA^a</i>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.098	2	.049	.396	.673 ^b
	Residual	50.119	404	.124		
	Total	50.217	406			
2	Regression	.349	3	.116	.940	.421 ^c
	Residual	49.868	403	.124		
	Total	50.217	406			
3	Regression	.591	4	.148	1.197	.311 ^d
	Residual	49.626	402	.123		
	Total	50.217	406			
4	Regression	.606	5	.121	.979	.430 ^e
	Residual	49.611	401	.124		
	Total	50.217	406			

Note. a. Dependent Variable: AffectiveCommitment

b. Predictors: (Constant), Conscientiousness_Sub, Conscientiousness_Sup

c. Predictors: (Constant), Conscientiousness_Sub, Conscientiousness_Sup, Conscient_SupXConscient_Sub

d. Predictors: (Constant), Conscientiousness_Sub, Conscientiousness_Sup, Conscient_SupXConscient_Sub, Conscient_SupSquared

e. Predictors: (Constant), Conscientiousness_Sub, Conscientiousness_Sup, Conscient_SupXConscient_Sub, Conscient_SupSquared, Conscient_SubSquared

Table 13

Model Summary

Mode	R	R	Adjusted R	Std. Error	Change Statistics				
1		Square	Square	of the	R Square	F	df1	df2	Sig. F
				Estimate	Change	Change			Change
1	.044 ^a	.002	-.003	.35222	.002	.396	2	404	.673
2	.083 ^b	.007	.000	.35177	.005	2.027	1	403	.155
3	.109 ^c	.012	.002	.35135	.005	1.962	1	402	.162
4	.110 ^d	.012	.000	.35174	.000	.118	1	401	.731

Note. a. Predictors: (Constant), Conscientiousness_Sub, Conscientiousness_Sup

b. Predictors: (Constant), Conscientiousness_Sub, Conscientiousness_Sup, Conscient_SupXConscient_Sub

c. Predictors: (Constant), Conscientiousness_Sub, Conscientiousness_Sup, Conscient_SupXConscient_Sub, Conscient_SupSquared

d. Predictors: (Constant), Conscientiousness_Sub, Conscientiousness_Sup, Conscient_SupXConscient_Sub, Conscient_SupSquared, Conscient_SubSquared

The fourth model regressed the neuroticism scores of both subordinates and supervisors, predicting affective commitment. The first block of the regression included scores for both subordinates and supervisors. Each additional block included the higher-order terms of the interaction and squared terms separately. None of the models were statistically significant, as shown in table 14. Table 15 reports the significance in change of R squared.

The fifth model regressed agreeableness scores of subordinates and supervisors predicting affective commitment. The first block of the regression included scores for both subordinates and supervisors. Each additional block included the higher-order terms of the interaction and squared terms separately. The first block including only the scores of the supervisors and subordinates was found to be

Table 14

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.047	2	.023	.188	.829 ^b
	Residual	50.170	404	.124		
	Total	50.217	406			
2	Regression	.285	3	.095	.767	.513 ^c
	Residual	49.932	403	.124		
	Total	50.217	406			
3	Regression	.369	4	.092	.743	.563 ^d
	Residual	49.848	402	.124		
	Total	50.217	406			
4	Regression	.682	5	.136	1.105	.357 ^e
	Residual	49.535	401	.124		
	Total	50.217	406			

Note. a. Dependent Variable: AffectiveCommitment

b. Predictors: (Constant), Neuroticism_Sub, Neuroticism_Sup

c. Predictors: (Constant), Neuroticism_Sub, Neuroticism_Sup, Neuroticism_SupXNeuroticism_Sub

d. Predictors: (Constant), Neuroticism_Sub, Neuroticism_Sup, Neuroticism_SupXNeuroticism_Sub, Neuroticism_SupSquared

e. Predictors: (Constant), Neuroticism_Sub, Neuroticism_Sup, Neuroticism_SupXNeuroticism_Sub, Neuroticism_SupSquared, Neuroticism_SubSquared

Table 15

Model Summary

Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.030 ^a	.001	-.004	.35240	.001	.188	2	404	.829
2	.075 ^b	.006	-.002	.35199	.005	1.926	1	403	.166
3	.086 ^c	.007	-.003	.35214	.002	.674	1	402	.412
4	.117 ^d	.014	.001	.35147	.006	2.538	1	401	.112

Table 16

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.875	2	.438	3.583	.029 ^b
	Residual	49.342	404	.122		
	Total	50.217	406			
2	Regression	1.035	3	.345	2.826	.038 ^c
	Residual	49.182	403	.122		
	Total	50.217	406			
3	Regression	1.141	4	.285	2.336	.055 ^d
	Residual	49.076	402	.122		
	Total	50.217	406			
4	Regression	1.753	5	.351	2.900	.014 ^e
	Residual	48.464	401	.121		
	Total	50.217	406			

Note. a. Dependent Variable: AffectiveCommitment

b. Predictors: (Constant), Agreeableness_Sub, Agreeableness_Sup

c. Predictors: (Constant), Agreeableness_Sub, Agreeableness_Sup, Agreeableness_SupXAgreeableness_Sub

d. Predictors: (Constant), Agreeableness_Sub, Agreeableness_Sup, Agreeableness_SupXAgreeableness_Sub, Agreeableness_SupSquared

e. Predictors: (Constant), Agreeableness_Sub, Agreeableness_Sup, Agreeableness_SupXAgreeableness_Sub, Agreeableness_SupSquared, Agreeableness_SubSquared

statistically significant ($p = .029$) in predicting affective commitment. The change in R squared from the first to the second and second to the third models was not significant. However, the change in the R squared from the third to the fourth (full model, including all the higher-order terms) was found to be statistically significant ($p = .025$).

Table 17

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			
						F Change	df1	df2	Sig. F Change
1	.132 ^a	.017	.013	.34947	.017	3.583	2	404	.029
2	.144 ^b	.021	.013	.34934	.003	1.307	1	403	.254
3	.151 ^c	.023	.013	.34940	.002	.867	1	402	.352
4	.187 ^d	.035	.023	.34765	.012	5.065	1	401	.025

Note. a. Predictors: (Constant), Agreeableness_Sub, Agreeableness_Sup

b. Predictors: (Constant), Agreeableness_Sub, Agreeableness_Sup, Agreeableness_SupXAgreeableness_Sub

c. Predictors: (Constant), Agreeableness_Sub, Agreeableness_Sup, Agreeableness_SupXAgreeableness_Sub, Agreeableness_SupSquared

d. Predictors: (Constant), Agreeableness_Sub, Agreeableness_Sup, Agreeableness_SupXAgreeableness_Sub, Agreeableness_SupSquared, Agreeableness_SubSquared

The results of the polynomial regression indicated that there was a significant correlation between affective commitment and the congruency of agreeableness scores between employees and supervisors. The salient features of the response-surface (Figure 5) described this relationship. I plotted employee and employer agreeableness scores as a function of affective commitment. I also examined affective commitment along the congruence (i.e. the prediction of affective commitment when employer and employee agreeableness scores are equal) and incongruence (i.e. the prediction of affective commitment when the agreeableness between employee and employer scores mismatch). Along the congruence line, (when employee and employer agreeableness scores are equal), the following quadratic equation results:

$$\text{Affective Commitment} = B_0 + (B_1 + B_2)X + (B_3 + B_4 + B_5)X^2 + e$$

The graph of this relationship is shown in Figure 6, in which I determined the coefficients from polynomial regression. The maximum of this function occurs when agreeableness is 3.37 and has a maximum affective commitment of 3.08. I calculated this by differentiating and finding the maximum value:

$$\text{Affective Commitment} = -1.928 + 2.973X - 0.441 X^2$$

$$D(\text{Affective Commitment})/DX = 2.973 - 0.882X = 0$$

$$X = 3.37$$

Results of SEM

I used SEM in order to assess the mediating effect of LMX between the personality congruence of supervisors and subordinates and affective commitment. First, I assessed the direct effect between the Big Five Personality traits and affective commitment. This model is shown in Figure 7. Table 18 depicts the results of this analysis. There was a significant relationship between affective commitment and the congruency of agreeableness between employers and employees. The overall model was significant ($\chi^2(10) = 9.342, p = .500$). The overall model fit (see Table 19) as estimated by the RMR and GFI showed good fit with RMR = .008 and GFI = .993.

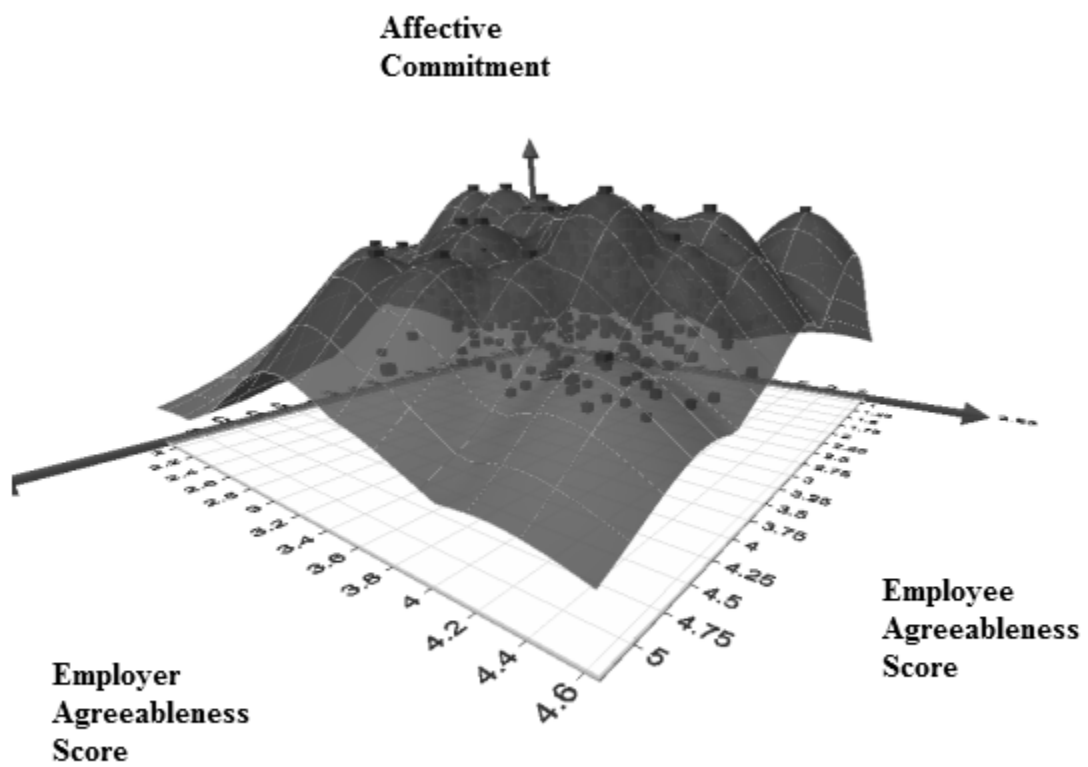


Figure 5. Response surface of employer and employee agreeableness scores as a function of affective commitment.

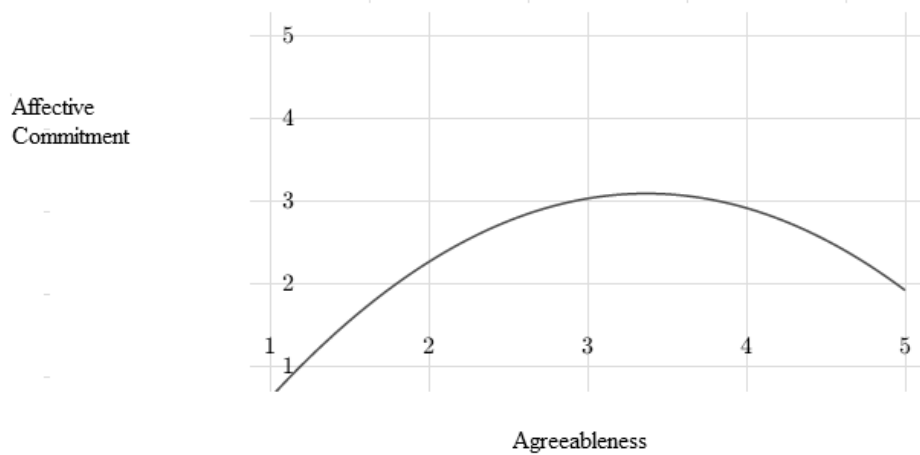


Figure 6. Relationship between agreeableness and affective commitment at perfect congruency.

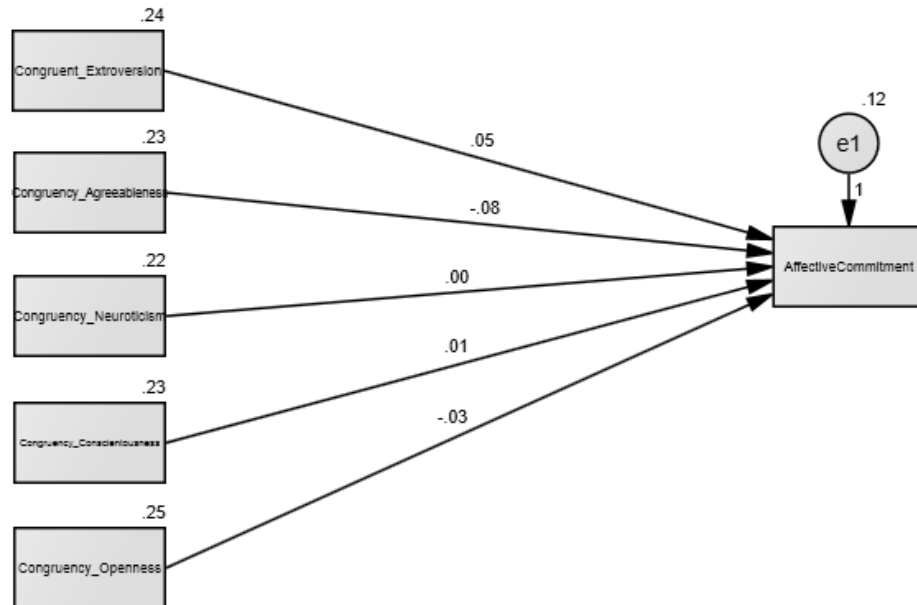


Figure 7. SEM model for measuring the direct effect between affective commitment and the Congruency of the Big Five Personality Traits

Table 18

SEM Results for the Direct Relationship between Affective Commitment and the Congruency of the Big Five Personality Traits

Relationship	Estimate	S.E.	C.R.	P
AffectiveCommitment <--- Congruent_Extroversion	.049	.035	1.411	.158
AffectiveCommitment <--- Congruency_Agreeableness	-.076	.036	-2.129	.033*
AffectiveCommitment <--- Congruency_Neuroticism	.002	.037	.050	.960
AffectiveCommitment <--- Congruency_Conscientiousness	.007	.036	.197	.844
AffectiveCommitment <--- Congruency_Openness	-.030	.035	-.857	.391

Note. * Denotes statistical significance at the 5% level.

Table 19

Model Fit Indexes: RMR, GFI

Model	RMR	GFI
Default model	.008	.993
Saturated model	.000	1.000

In order to test for a possible mediating effect of LMX, I tested the following model in AMOS.

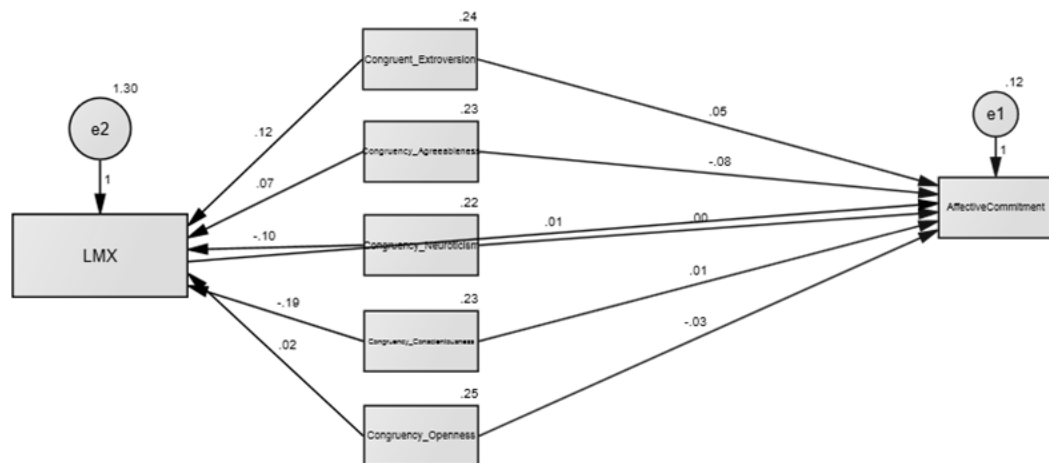


Figure 8. SEM model for measuring the possible mediating effect of LMX between affective commitment and the Congruency of the Big Five Personality Traits.

Table 20 depicts the results of this analysis. There were no significant correlations ($p > .05$) between LMX and the Big Five personality congruencies, or between LMX and affective commitment. Due to this lack of significant correlation, there was no mediating role of leader-member exchange perceptions of subordinates on the relationship between personality congruence of supervisors and subordinates

and affective commitment of subordinates. I assessed the overall fit of the model by GFI and RMR values (see Table 21). Model fit indexes of RMR = .007 and GFI = .994 suggested a good-fitting model.

Table 20

SEM Results for Measuring the Possible Mediating Effect Between Affective Commitment and the Congruency of the Big Five Personality Traits

	Relationship	Estimate	S.E.	C.R.	P
LMX	<--- Congruent_Extroversion	.119	.115	1.034	.301
LMX	<--- Congruency_Agreeableness	.074	.117	.627	.531
LMX	<--- Congruency_Neuroticism	-.103	.122	-.851	.395
LMX	<--- Congruency_Conscientiousness	-.193	.117	-1.654	.098
LMX	<--- Congruency_Openness	.020	.114	.174	.862
AffectiveCommitment	<--- Congruent_Extroversion	.048	.035	1.378	.168
AffectiveCommitment	<--- Congruency_Agreeableness	-.077	.036	-2.148	.032*
AffectiveCommitment	<--- Congruency_Neuroticism	.003	.037	.077	.939
AffectiveCommitment	<--- Congruency_Conscientiousness	.009	.036	.248	.804
AffectiveCommitment	<--- Congruency_Openness	-.030	.035	-.863	.388
AffectiveCommitment	<--- LMX	.010	.015	.632	.527

Note. * Denotes significance at the 5% level.

Table 21

Model Fit Indexes

Model	RMR	GFI
Default model	.007	.994
Saturated model	.000	1.000
Independence model	.014	.985

Summary

The aim of this study was to investigate the mediating role of leader-member exchange perceptions of subordinates on the relationship between personality congruence of supervisors and subordinates and affective commitment of subordinates. I determined that there were no significant relationships between affective commitment and the other four personality traits: openness, conscientiousness, extraversion, and neuroticism. I performed SEM in SPSS AMOS in order to test the mediating effect of LMX between the congruence of the Big Five Personality traits of supervisors and subordinates, and affective commitment of subordinates. The results, however, showed that there were no significant correlations ($p > .05$) between LMX and the personality traits and affective commitment, thus there was no mediating effect of LMX to be established.

In Chapter 5, I will discuss how these findings compare with similar studies of peer-reviewed literature found in Chapter 2. I will address limitations of the study. I will also address any implications of positive social change, and recommendations for further research that are grounded in the strengths and limitations of the current study.

Chapter 5: Conclusion

Introduction

The aim of this study was to investigate the mediating role of LMX perceptions of subordinates on the relationship between personality congruence of supervisors and subordinates and affective commitment of subordinates. I measured the personality traits, which were the independent variables of this study, using the BFI, which measures openness, conscientiousness, extraversion, agreeableness, and neuroticism. The LMX-7 scale measured LMX, which was the mediating variable of this study. Finally, I measured affective commitment, which was the dependent variable of this study, using Allen and Meyer's ACS. This study was guided by two research questions. Each research question had five null and alternative hypotheses, one for each of the five Big Five personality traits.

RQ1 (Quantitative): Is there a significant relationship between the congruence of the Big Five personality traits and affective commitment of subordinates?

H₁: There is a significant relationship between the congruence of the Big Five personality traits of subordinates and supervisors and affective commitment of subordinates.

H_{1A}: There is a significant relationship between the congruence of the openness personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{1B}: There is a significant relationship between the congruence of the conscientiousness personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{1C}: There is a significant relationship between the congruence of the extraversion personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{1D}: There is a significant relationship between the congruence of the agreeableness personality trait of supervisors and subordinates and affective commitment of subordinates.

H_{1E}: There is a significant relationship between the congruence of the neuroticism personality trait of supervisors and subordinates and affective commitment of subordinates.

RQ2 (Quantitative): Will LMX mediate the relationship between the congruence of the Big Five Personality traits of supervisors and subordinates and affective commitment of subordinates?

H₂: LMX will mediate the relationship between the congruence of the Big Five Personality traits of supervisors and subordinates and affective commitment of subordinates.

H_{2A}: LMX will mediate the relationship between the congruence of the openness personality trait of supervisors and subordinates and affective commitment of subordinates.

H₂B: LMX will mediate the relationship between the congruence of the conscientiousness personality trait of supervisors and subordinates and affective commitment of subordinates.

H₂C: *LMX* will mediate the relationship between the congruence of the extraversion personality trait of supervisors and subordinates and affective commitment of subordinates.

H₂D: LMX will mediate the relationship between the congruence of the agreeableness personality trait of supervisors and subordinates and affective commitment of subordinates.

H₂E: LMX will mediate the relationship between the congruence of the neuroticism personality trait of supervisors and subordinates and affective commitment of subordinates.

I assessed normality through examination of kurtosis and skewness statistics, and assessed outliers via standardized residuals. There were no significant violations of normality and no significant outliers. I performed polynomial regression to assess the relationships between these five personality traits. There was a significant relationship between affective commitment and agreeableness between employers and employees ($p < .05$). However, there were no other significant relationships between affective commitment and the other four personality traits of openness, conscientiousness, extraversion, and neuroticism.

I performed SEM in SPSS AMOS in order to test the second research question regarding the possible mediating effect of LMX. In order to test for mediation, I measured the direct effect between the BFI personality congruencies and affective

commitment. There was a significant relationship between the congruency of agreeableness and affective commitment ($p < .05$), but not with the other personality traits. These results agreed with the previously mentioned polynomial regression. The goodness of fit indexes of GFI and RMR suggested a good fitting model. After the direct effect between the congruencies of personality traits and affective commitment had been verified, I added LMX into the SEM model to test for mediating effects. The results, however, showed that there were no significant correlations ($p > .05$) between LMX and the personality traits and affective commitment, and thus there was no mediating effect of LMX to be established.

Interpretation of the Findings

According to Allen and Meyer's (1990) three-dimensional model of organizational commitment, the basic model relies on the assumption that each dimension of affective, continuance, and normative commitment develops through different experiences, and each of them has a different effect on the work outcomes. All three of the dimensions are negatively correlated with intentions to quit. This indicated that the dimensions of organizational commitment were negatively related to the turnover of employees. This strengthened the need to increase the affective commitment of employees. In this study, I measured the direct effect between the Big Five personality traits of congruence of supervisors and subordinates and affective commitment. The results of the study indicated that there was a significant correlation between the congruency of agreeableness of employers and subordinates and affective commitment. Through polynomial regression, I obtained a maximum value of affective commitment when the agreeableness personality trait was 3.37. As the

agreeableness score increased, affective commitment peaked at 3.37, then declined with an increasing agreeableness score. Dienesch and Liden (1986) were among the first to propose the influence of personality congruence of supervisors and subordinates on LMX perception of subordinates. This study investigated whether specific personality congruence traits affect the perception of leader-member exchange dyadic relationships.

Zhang et al. (2012) investigated the congruence effect of leader and follower proactive personality on LMX quality, which in turn influenced follower job satisfaction, affective commitment, and job performance. Results of cross-level polynomial regressions on 165 dyads supported the congruence effect hypothesis. Conscientious subordinates can be referred to as having high degrees of responsibility both towards the jobs they perform, and towards their organization. As LMX is a social exchange in its nature, it can be assumed that there is a positive link between the similarity in conscientiousness level of the subordinates and supervisors and subordinates' perceptions of LMX (Bernerth et al., 2007). The results of this study, however, indicated no significant correlation between the congruence of conscientious and LMX.

Phillips and Bedeian (1994) investigated the role of extraverted personality congruence of supervisors and subordinates on LMX perception of subordinates. Employees who scored high on extraversion were engaged in social interaction with their colleagues and supervisors more often than introverts were. Through structural equation modeling, however, they found no significant correlation between extrovert congruency and LMX.

Agreeable individuals are likely to form positive interactions with others, due to their nature. Agreeable individuals respect other people's rights, value the needs and wants of others, and are cooperative (Costa & McCrae, 1992). In terms of leader-member exchange relationships, such open and trust-based interactions are a *sine qua non*. Therefore, the subordinate wishes to do as much as possible for the organization and the supervisor in order to pay back all the warmth and kindness received from a supervisor. Thus, a dyadic relationship occurs between the supervisor and subordinate (Mayer et al., 2007). In spite of this relationship, SEM yielded no significant correlation between LMX and agreeableness congruency in this current study.

The openness trait is mostly related to intellectual curiosity, as well as to flexibility, and adapting to new situations and challenges. Thus, an employee who scores high on openness would be willing to experience novel situations. Supervisors will be happy and content to have such self-motivated, enthusiastic, and open-minded subordinates. Because LMX is a dyadic relationship, the subordinate would also want to reward those employees and thus a mutual positive relation would be formed. This study revealed no significant relationship between openness congruency and LMX.

Bernerth et al. (2007, 2008) assumed that neuroticism, unlike other four personality traits (extraversion, agreeableness, conscientiousness, and openness), has a negative impact on the LMX perception of subordinates. Neuroticism is associated with low levels of self-respect and value on the part of an individual. In addition, individuals high on neuroticism are known to experience negative emotions for quite some time. Thus, one can assume that congruence in neuroticism has an adverse

influence on the subordinate's perceptions of LMX. SEM conducted in this study, however, showed no significant correlation.

In addition to exploring the relationships between the congruency of each of the Big Five personality traits to affective commitment, the other aim was to fill the gap in the literature by investigating the mediating role of LMX perception of subordinates, between the relationship of the personality congruence of supervisors and subordinates and affective commitment. The results of this study, however, determined that LMX was not a mediator, as it was not significantly related to any of the Big Five personality congruency traits or affective commitment. Perhaps one explanation for these results is that subordinates engage in different reciprocation efforts depending on the exchange partner (Settoon, Bennett, & Liden, 1996). Although the supervisor is seen by subordinates as a representative of the organization (Rhoades & Eisenberger, 2002; Schyns et al., 2005), his or her identity is separate from that of the organization. Specifically, in a hierarchically structured organization, subordinates who are under the direct control of an immediate supervisor may not generalize their perceptions of their supervisor's management style to the overall organization. In such a hierarchy, multi-level modeling is best suited for such data (Bosker, 2011).

Limitations of the Study

One limitation of this study concerned subordinate bias and the fact that all the questionnaires were self-reported. The self-report nature of the questionnaires limited the study to the honesty and the understanding of participants. Social desirability bias was another possible limitation. It is defined as a type of response bias that is the

tendency of survey respondents to answer questions in a manner that others will view favorably.

One of the delimitations of this study was related to the voluntary nature of the proposed research. The participants represented only the subordinate-supervisor dyads who had voluntarily agreed to be a part of this study. In addition, because this study was conducted in Ankara, using supervisors and subordinates from three technopolises, the findings of the study are limited in terms of generalizability to cities of Turkey.

Another limitation of this study pertained to the information gathered from the respondents. Although the analysis was conducted on personality traits from two perspectives (i.e., the subordinates' and supervisors' perspectives), I only analyzed LMX perceptions and affective commitment from the subordinates' point of view. It is possible that this one-sided point of view may have affected the outcome of the study by not fully investigating LMX and affective commitment from the perceptions perspectives of both the subordinates and supervisors.

Recommendations

The lack of evidence in this study to support the mediating role of LMX perceptions of subordinates on the relationship between personality congruence of supervisors and subordinates and affective commitment of subordinates calls for further investigation. As noted previously, one possible reason for this lack of mediation may be due to the hierarchical structure of the organization (Carpenter, Berry, & Houston, 2014; Gonyea, 2005; Panadero & Romero, 2014). Future researchers should seek to capture structure. Subordinates who are under the direct

control of an immediate supervisor may not generalize their perceptions of their supervisor's management style to the overall organization. If other analyses were conducted using multi-level hierarchical modeling, perhaps a significant result on the mediation effect of LMX could be established.

Implications

This study offered several implications that might be helpful to managers and organizations in facilitating organizational and individual outcomes. Understanding the role of personality congruence of supervisors and subordinates, along with the effect of leader-member exchange on the affective commitment of the subordinates can help advance employee performance, thereby impacting the performance of the organizations. Choi, Oh, and Colbert (2015), and Templer (2012) confirmed the relationship between agreeableness congruence of supervisors and subordinates and being a collectivistic culture. According to Templer, there is a positive relationship between agreeableness and collectivism, thus subordinates in a collectivistic culture would tend to be more trusting and sensitive towards each other. Boeteng and Agyemang (2016) mentioned that agreeable people tend to be more team work-oriented, more tolerant, and more understanding, which are also the traits of individuals in a collectivistic culture.

This study had several benefits: (a) advancing theory, (b) advances in practice, and (c) positive social change. First, by evaluating the role of personality congruence between supervisors and subordinates on the LMX perceptions of subordinates, it contributed to the literature by showing the current situation in a developing country such as Turkey. As previously mentioned, this study also underscored the influence of

culture on the relationship between personality congruence of supervisors and subordinates on the affective commitment of subordinates, which is mediated by LMX.

Secondly, a research study examining the impact of LMX perceptions of subordinates, as influenced by personality congruence of supervisors and subordinates on affective commitment was the first in the literature, thus fulfilling recommendations by several authors (Bernerth et al., 2007, 2008). The second benefit is for the advancement of organizations, especially in the ever-changing business environment. Understanding the significance of personality congruence in the work environment might help both supervisors and HR practitioners in managing absenteeism and turnover, recruiting and hiring, as well as with promoting employees.

This study examined the relationship between the congruency of employers and subordinates of each of the Big Five personality traits and affective commitment. As previous research has established that the dimensions of organizational commitment are negatively related to the turnover of employees, the need to increase the affective commitment of employees is imperative. This study uncovered the significant relationship between the agreeableness the congruency personality trait and affective commitment. Through polynomial regression, it was possible to optimize affective commitment by estimating the critical values of the polynomial function, which provided an agreeableness congruency score that maximized this relation. This information can be used by organization leaders to better structure their operations in order to achieve this maximum value of affective commitment, which in turn would decrease turnover rates within the organization. The third benefit of the

study is that it helps to create a positive social change by stressing the importance of understanding the mediating effect of LMX on the relationship between personality congruence and affective commitment contributes that highlights the importance of social relationships at work, and how these relationships impact their affective commitment to the organization.

A second feasible significance of this study in promoting positive social change is related to enhancing affective commitment in organizations, and personality congruence of supervisors and subordinates as one of the factors that influence this process. It is important to understand the agreeableness congruence of supervisors and subordinates helps to unite the organization's targets with the subordinates' targets, and thus results in volunteered efforts for the advancement of the organizations. This would result in advancement of the society by creating a positive change. Effective organizations help to foster the society.

As Bernerth et al. (2007) said, "even a single disagreeable member of a team can be harmful to the overall performance of the team" (p. 103). Moreover, the agreeableness congruence of supervisors and subordinates helps to create a reciprocally advantageous relationship. Agreeable individuals are ready to trust, sensitive towards others, and show consideration to others' feelings and behaviors. Such a mutual understanding to interpersonal relationships will help the supervisor and subordinate to carry out supportive and reassuring point of views towards each other; particularly, a higher quality LMX perceived between the supervisors and subordinates, who have agreeableness congruence, will positively influence the way

they negotiate and compromise on attaining organizational targets. This will result in the organization's engagement to create a positive social change.

Conclusion

The personality congruence of supervisors and subordinates and its influence on work outcomes such as the leader-member exchange relationship and organizational commitment of subordinates is a relatively new topic in social and behavioral sciences. Leader-member exchange (LMX) theory focuses on the mutual relationship between a supervisor and a subordinate, rather than a supervisor adopting a general leadership style. The aim of this study was to investigate the mediating role of LMX perceptions of subordinates on the relationship between personality congruence of supervisors and subordinates and affective commitment of subordinates.

This research showed that agreeableness congruence influences affective commitment of the subordinate, which is mediated by LMX, although no other personality traits congruence influences affective commitment (conscientiousness, extraversion, neuroticism, and openness) of the subordinates mediated by LMX. The reason may be because the surveys were self-reported. Blair, Czaja, and Blair (2013), Fowler (2013), Kormos and Gifford (2014), and Meier and O'Toole (2013) suggested that self-reported surveys are not always accurate, as there is a tendency to over evaluate one's traits.

Although Tokar and Subich (1997) and Zhang et al. (2012) have addressed personality congruence of supervisors and subordinates, and its influence on work outcomes, the rarity of such studies creates the need for further research. Because this

study gathered data related to personality from both the supervisors and subordinates, this will enrich the scope of this study and organizational psychology studies, as well as answer further research calls from several authors (Bernerth et al., 2007, 2008).

The personal characteristics of supervisors and subordinates and its congruence may create discrepancy between the interaction of supervisors and subordinates, and thus may have a significant influence on this exchange (Bernerth et al., 2007, 2008; Dienesch & Liden, 1986). However, as Bernerth et al. (2007, 2008) and Phillips and Bedeian (1994) mentioned, personality traits, as variables, were researched in a narrow scope, and in only a few studies. In addition, this study will help field researchers to understand the current tendencies in Turkish organizations in terms of personality congruence of supervisors and subordinates, and its influence on affective commitment of subordinates as mediated by LMX. Turkey is a developing country that possesses collectivistic culture traits, and thus may be a comparative base for researchers to carry out similar studies in individualistic cultures.

Although this study did not find any mediating effect of leader-member exchange (LMX), it did help to establish a significant relationship between affective commitment and the agreeableness personality congruence of supervisors and subordinates. This enabled the researcher to examine critical values that maximized affective commitment. Further studies should be conducted to capture the hierarchical nature of the organization; if this is accomplished, perhaps significant results could be achieved regarding the possible mediating effect of LMX.

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Appendix A: Permission Letter to use Affective Commitment Scale

Ebru Inanc <ebru.inanc@waldenu.edu>

Apr 21

to meyer

Dear Dr.Meyer,

This is Ebru Inanc, from Turkey. I am currently studying at Walden University, and working on my PhD dissertation, which is about the personality congruence of supervisors and subordinates, its influence of LMX perceptions of subordinates, and job satisfaction and affective commitment of subordinates.

I would like to take your permission on using the Affective Commitment Scale measure and add a copy of the measure in the Appendix section of my dissertation.

Best Regards,

Ebru Inanc

<http://www.bim.bilkent.edu.tr/~inanc/>

John Meyer <meyer@uwo.ca>

Apr 21

to me

Dear Ebru,

You can get the commitment scales and permission to use them for academic research purposes from the following website: <http://employeecommitment.com>. I hope all goes well with your research.

Best regards,
John

Appendix B: Permission Letter to use LMX Scale

Ebru Inanc <ebru.inanc@waldenu.edu>

Apr 21

to lp39

Dear Dr. Paglis,

This is Ebru Inanc, from Turkey. I am currently studying at Walden University, and working on my PhD dissertation, which is about the influence of LMX perceptions of subordinates on the personality congruence of subordinates and supervisors, and work outcomes of subordinates. I would like your permission on using the new LMX-7 measure published in Paglis & Green (2002), and add a copy of the measure in the Appendix section of my dissertation.

Best Regards,

Ebru Inanc

Dwyer, Laura <lp39@evansville.edu>

Apr 21

to me

Hi Ebru,

Yes, you may use that published scale. Best of luck with your research.

Dr. Dwyer

Laura P Dwyer, PhD

Associate Professor of Management

Schroeder School of Business

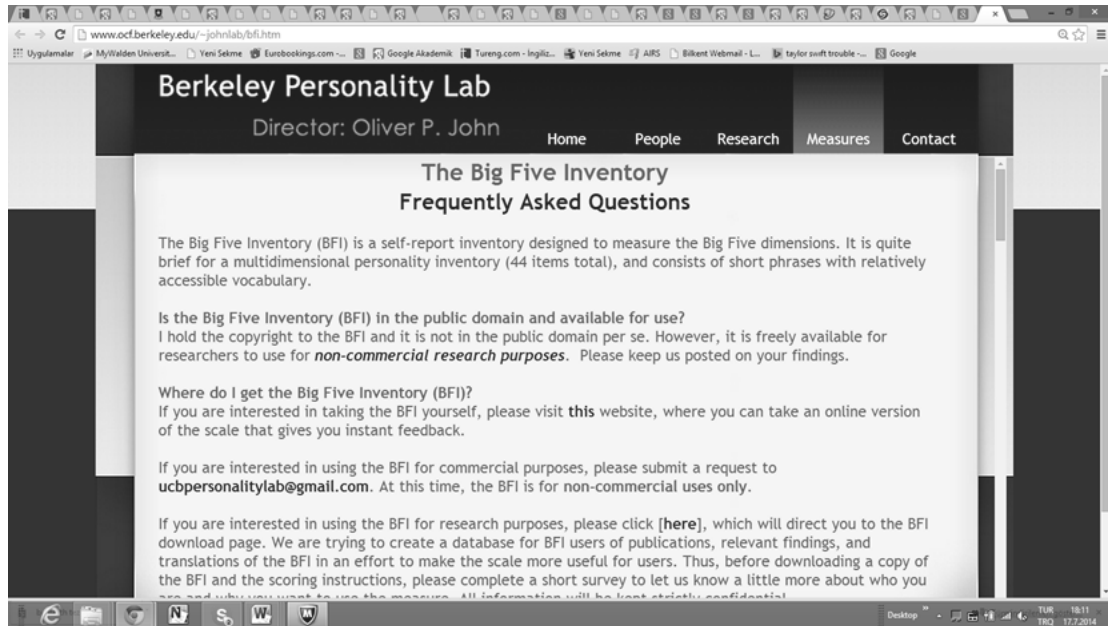
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Appendix C: Permission to use BFI



Appendix D: Leader-Member Exchange Scale

Part II: Leader-Member Exchange

This is a questionnaire to provide a description about your feelings, thoughts and ideas about your IMMEDIATE SUPERVISOR.

Directions: Listed below are descriptive statements about the manager you are rating. For each statement, we would like you to judge how frequently your manager has displayed the behavior described. Using the following scale, please write the appropriate number for you:

- Disagree Strongly = 1
 Disagree a Little = 2
 Neither Disagree Nor Agree = 3
 Agree a Little = 4
 Agree Strongly = 5

	1	2	3	4	5
1. I know where I stand with my manager and usually know how satisfied my manager is with what I do					
2. My manager understands my job problems and needs					
3. My manager recognizes my potential.					
4. Regardless of how much formal authority my manager has built into his or her position, my manager would use his or her power to help me solve problems in my work					
5. Again, regardless of the amount of formal authority my manager has, he or she would "bail me out" at his or her expense?					
6. I have enough confidence in my manager that I would defend and justify his or her decision if he or she were not present to do so.					
7. I would characterize my working relationship with my manager as extremely effective.					

Appendix E: Affective Commitment Scale

Part IV: Affective Commitment

The following statements concern your emotions about the organization you work for. Using the following scale, please write the appropriate number for you to indicate the extent to which you agree or disagree with that statement:

Disagree Strongly = 1
 Disagree a Little = 2
 Neither Disagree Nor Agree = 3
 Agree a Little = 4
 Agree Strongly = 5

	1	2	3	4	5
1. I would be very happy to spend the rest of my career with this organization.					
2. I really feel as if this organization's problems are my own.					
3. I do not feel a strong sense of "belonging" to my organization.					
4. I do not feel "emotionally attached" to this organization					
5. I do not feel like "part of the family" at my organization					
6. This organization has a great deal of personal meaning for me.					

Appendix F: Big Five Inventory

Part III: Big Five Personality traits

The following statements concern your perception about yourself in a variety of situations.

There are no "right" or "wrong" answers, so select a number that most closely reflects you on each statement.

There are 44 items. It's important that you respond to all statements.

Using the following scale, please write the appropriate number for you to indicate the extent to which you agree or disagree with that statement:

Disagree Strongly = 1
 Disagree a Little = 2
 Neither Disagree Nor Agree = 3
 Agree a Little = 4
 Agree Strongly = 5

	1	2	3	4	5
1. Is talkative					
2. Tends to find fault with others					
3. Does a thorough job					
4. Is depressed, blue					
5. Is original, comes up with new ideas					
6. Is reserved					
7. Is helpful and unselfish with others					
8. Can be somewhat careless					
9. Is relaxed, handle stress well					
10. Is curious about many different things					
11. Is full of energy					
12. Starts quarrels with others					
13. Is a reliable worker					
14. Can be tense					
15. Is ingenious, a deep thinker					
16. Generates a lot of enthusiasm					
17. Has a forgiving nature					
18. Tends to be disorganized					
19. Worries a lot					
20. Has an active imagination					
21. Tends to be quiet					
22. Is generally trusting					
23. Tends to be lazy					
24. Is emotionally stable, not easily upset					
25. Is inventive					
26. Has an assertive personality					
27. Can be cold and aloof					
28. Perseveres until the task is finished					

29. Can be moody					
30. Values artistic, aesthetic experiences					
31. Is sometimes shy, inhibited					
32. Is considerate and kind to almost everyone					
	1	2	3	4	5
33. Does things efficiently					
34. Remains calm in tense situations					
35. Prefers work that is routine					
36. Is outgoing, sociable					
37. Is sometimes rude to others					
38. Makes plans and follows through with them					
39. Gets nervous easily					
40. Likes to reflect, play with ideas					
41. Has few artistic interests					
42. Likes to cooperate with others					
43. Is easily distracted					
44. Is sophisticated in art, music or literature					